



Universität Augsburg

Institut für
Mathematik

Kai-Friederike Oelbermann, Antonio Palomares, Friedrich Pukelsheim

The 2009 European Parliament Elections: From Votes to Seats in 27 Ways

Preprint Nr. 08/2010 — 07. Juni 2010

Institut für Mathematik, Universitätsstraße, D-86135 Augsburg

<http://www.math.uni-augsburg.de/>

Impressum:

Herausgeber:

Institut für Mathematik

Universität Augsburg

86135 Augsburg

<http://www.math.uni-augsburg.de/pages/de/forschung/preprints.shtml>

ViSdP:

Friedrich Pukelsheim

Institut für Mathematik

Universität Augsburg

86135 Augsburg

Preprint: Sämtliche Rechte verbleiben den Autoren © 2010

The 2009 European Parliament Elections: From Votes to Seats in 27 Ways*

Kai-Friederike Oelbermann[†], Antonio Palomares[‡] and Friedrich Pukelsheim[§]

June 2, 2010

Abstract

The 2009 European Parliament elections were the largest transnational elections in history. By EU primary law each Member State is allotted a fixed number of seats. Within a Member State, the seat apportionment is governed by national electoral provisions. The national provisions are subject to *principles common to all Member States*. We present an overview of the 27 national apportionment procedures used in the 2009 elections. Our focus is on the translation of votes into seats, such as electoral thresholds, divisor methods of apportionment, quota methods of apportionment, and single transferable vote systems. Some Member States implement two-step systems comprising a super-apportionment and several sub-apportionments.

Contents

1	Introduction	2
2	European law and national electoral provisions	4
2.1	EU documents on the composition of the European Parliament	5
2.2	European Electoral Act of 1976	5
2.3	European Electoral Act as amended in 2002	6
3	Implications for the apportionment procedures	7
3.1	Electoral thresholds, and effective votes (Art. 2A)	7
3.2	Single electoral area, and the establishment of constituencies (Art. 2)	8
3.3	Subdivision into electoral districts, and electoral alliances (Art. 2)	8
3.4	Translation of votes into seats: Methods and systems (Art. 1)	9
3.5	Divisor methods of apportionment	9
3.6	Quota methods of apportionment	10
3.7	Single transferable vote systems	11
4	Apportionment procedures used in the 2009 elections	12
4.1	European parliamentary groups, and format of tables	12
4.2	Survey of the 27 Member States	12
	Bibliography	32
	Articles	32
	European Documents	33
	National Electoral Provisions and Election Results	34

*The authors would like to most gratefully acknowledge the generous assistance provided by Richard Blackman, Tasos Christofides, Jørgen Elklit, Eirini-Maria Gounari, Juha Helin, Peter Mach, Iride M. Marossero, Hannu Nurmi, Andrej Pázman, Lyubka Savkova, Ingrida Unikaitė, Nikolai Vulchanov.

[†]Institute for Mathematics, University of Augsburg

[‡]Department of Applied Mathematics, University of Granada

[§]Institute for Mathematics, University of Augsburg

1 Introduction

The European Parliament elections of 4–7 June 2009 were the largest transnational elections in history. In view of the non-existence of a European electoral authority it is quite challenging to assemble the electoral results, and to compare the procedures used to translate votes into seats. For instance, the total number of EU citizens that had the franchise to vote is not given by any official EU board. Summing up the electorates of the 27 Member States, we find that 384 928 081 EU citizens had the right to vote.

Our main focus lies in a detailed description of the seat apportionment procedures used in the 27 Member States, in Section 4. Since the procedures differ the plural form, elections, is usually used when referring to how the European Parliament is elected. Our presentation complements and updates the information given in [Silvestro1990] for the 1989 elections, [Blackman1999, Puntischer2003, Nohlen2004, FarrellScully2005] for the 2004 elections, and [OSCE2009, Lehmann2009, Wahlrecht.de, Wuest2009] for the 2009 elections. We remark that [Duff2008] demands the creation of an EU electoral authority.

While Member States publicize the national electoral results in their traditional ways, we choose a unified scheme to ease comparison of the different electoral systems. Pertinent indices are put together in Table 1, while the acronyms for the electoral procedures are introduced in Subsections 3.4 to 3.7.

Section 2 starts out by reviewing the legal frame for European Parliament elections. The universal right to vote is secured by the CONVENTION FOR THE PROTECTION OF HUMAN RIGHTS AND FUNDAMENTAL FREEDOMS. Legislation on the electoral procedure itself splits into two parts. Firstly, EU primary law and accession treaties determine the composition of the European Parliament, thus prescribing the number of representatives to be elected in each Member State, see Subsection 2.1. Secondly, with the entry into force of the AMSTERDAM TREATY, the national electoral provisions must conform to *principles common to all Member States*. The principles are laid down in the EUROPEAN ELECTORAL ACT of 1976 and 2002, as reviewed in Subsections 2.2 and 2.3.

In Section 3 we turn to the three principles pertinent to the seat apportionment calculations. The first principle deals with electoral thresholds. Art. 2A allows the introduction of thresholds that *may not exceed 5 per cent of votes cast*. Indeed, the electoral thresholds used cover a wide scope of variance. Most thresholds are calculated relative to valid votes, others relative to votes cast, and in some cases they emerge implicitly due to the apportionment calculations. In our analysis it turns out that the thresholds in Bulgaria and Lithuania appear to violate Art. 2A, both exceeding 5 percent of votes cast. In the course of the threshold analysis we find it essential to distinguish between *effective votes* and *ineffective votes*. By definition, effective votes are valid votes cast for parties that pass the electoral threshold. Ineffective votes for those cast for parties not passing the threshold. The effective votes in the 2009 elections total 148 271 668, while 12 086 125 votes are discarded because of being ineffective, see Subsection 3.1.

The second principle turns to Art. 2 that allows to allocate seats, not just in a single calculation across the entire electoral area, but in regional subdivisions. There are two ways of doing so. The first has a Member State *establish constituencies* for which the number of seats (also known as district magnitude, or constituency magnitude) is pre-specified *a priori*. Then seats are allocated separately within each constituency, see Subsection 3.2. Another way is for a Member State to *subdivide its electoral area in a different manner*. Here we speak of a subdivision of the electoral area into *electoral districts*. The number of seats to be allocated in a district is decided upon *a posteriori*, depending on the vote counts. It transpires that electoral alliances among several parties are methodologically related to the handling of electoral districts. Therefore both concepts are explained side by side, in Subsection 3.3.

Member State	Seats	Const.	Threshold	Procedure	Two-step systems
AT Austria	17 + 2	1	4% of valid v.	DivDwn	3 alliances, DivDwn
BE Belgium	22	3	—	DivDwn	
BG Bulgaria	17 + 1	1	implicit ¹	HaQgrR	
CY Cyprus	6	1	1.8% of valid v.	HQ3grR	
CZ Czech Republic	22	1	5% of valid v.	DivDwn	
DE Germany	99 – 3 ²	1	5% of valid v.	DivStd	
DK Denmark	13	1	—	DivDwn	
EE Estonia	6	1	—	DivDwn	
EL Greece	22	1	3% of valid v.	HQ3-EL ³	
ES Spain	50 + 4	1	—	DivDwn	
FI Finland	13	1	—	DivDwn	1 alliance, plurality ⁴
FR France	72 + 2	8	5% of valid v. ⁵	DivDwn	
HU Hungary	22	1	5% of valid v.	DivDwn	5 districts, HQ1grR
IE Ireland	12	4	—	STVran	
IT Italy	72 + 1	1	4% of valid v. ⁶	HQ1grR	
LT Lithuania	12	1	hybrid ⁷	HQ2grR	
LU Luxembourg	6	1	—	DivDwn ⁸	
LV Latvia	8 + 1	1	5% of v. cast	DivStd	3 alliances, HaQgrR 13 districts, HaQgrR
MT Malta	5 + 1	1	—	STVran	
NL Netherlands	25 + 1	1	—	DivDwn	
PL Poland	50 + 1	1	5% of valid v.	DivDwn	
PT Portugal	22	1	—	DivDwn	
RO Romania	33	1	5% of valid v. ⁹	DivDwn	
SE Sweden	18 + 2	1	4% ¹⁰	Div0.7	
SI Slovenia	7 + 1	1	4% ¹¹	DivDwn	
SK Slovak Republic	13	1	5% of valid v.	DQ3grR	
UK United Kingdom	72 + 1	12	—	DivDwn ¹²	
Sum	736 + 18 – 3	50			

Table 1: Member State indices for the 2009 elections. 736 seats are allotted in the ACCESSION TREATY OF BULGARIA AND ROMANIA, plus and minus adjustments due to the LISBON TREATY. Four States establish constituencies. Thresholds refer to valid votes or to votes cast, or emerge implicitly. Five Member States use two-step systems to handle regional subdivisions and electoral alliances.

The third principle, in Art. 1, states that the seat apportionment procedures must secure *proportional representation*. The procedures used are either divisor methods (Subsection 3.5), quota methods (Subsection 3.6), or single transferable vote (STV) systems (Subsection 3.7). We use the term *method* to refer to electoral formulas, while the term *system* leaves a wider scope of appreciation. Divisor methods and quota methods are thoroughly analyzed in [BalinskiY-oung2001]. Finally, *independent candidates* are taken to be candidates with no party affiliation, as in Romania, Estonia, and the United Kingdom. In contrast, *nominees* are candidates who also run for a party, as in the STV systems in Malta, Ireland, and Northern Ireland.

¹Based on DQ4 (equivalent to 5.8 percent of votes cast).

²3 seats less after the 2009-2014 legislative period.

³A hybrid residual apportionment involving DQ4, see Subsection 4.2

⁴On the basis of preferential votes.

⁵Per constituency.

⁶Minority parties may be exempted from the threshold.

⁷5% of votes cast, and full-seat restriction (equivalent to 6.7 percent of votes cast).

⁸Six votes per ballot.

⁹Separate threshold for independent candidates based on DQ4 (equivalent to 2.9 percent of votes cast).

¹⁰Unclear, refers to *votes in Sweden*.

¹¹Unclear, refers to *votes in the whole country*.

¹²Except for STVfra in Northern Ireland.

During our study we met with some difficulties, of which the major were the following.

- Identification of national electoral provisions in the Internet is by no means an easy task. Some Member States seem to provide legal information only in their mother tongues.
- Tracing the election results in the Internet was not trivial either. In fact, sometimes it remains unclear which authority publicizes the election results, compare [Wall2006].
- The Italian link broke after some months, the files having been moved to the election archive of the Ministry of the Interior. Yet the vote counts for the five districts do not sum to the given total.
- The Cypriot link broke, too, and thereafter failed us permanently.
- The French provisions stipulate that the threshold refers to *voix exprimées*, which we would translate into votes cast. However, the threshold is calculated relative to valid votes.

We conclude this Introduction with some general remarks. Prior to the MAASTRICHT TREATY [Maastricht1993], the European Parliament was called the European Assembly, and sheltered deputies. It continues to be the only directly elected body of the European Union. Its representatives, elected for a five year period, play an active role in drafting European legislation. Role and functioning of the European Parliament are described in works such as [Lenz1995, Hovehne1999, Axt2006, Wuest2006, Wessels2008]. For the debate on the Union's democratic deficit, see such papers as [Millar1990, Reif1997, Nohlen2004, FarrellScully2007, Schleicher2009], or [EP2009].

Throughout the paper titles of laws and treaties are printed in SMALL CAPITALS. Quotes from official documents and terminological conventions appear in *italics*. The bibliography contains a complete list of weblinks of all 27 national electoral provisions and 2009 election results.

2 European law and national electoral provisions

In the broadest sense, the electoral foundations are laid down in the CONVENTION FOR THE PROTECTION OF HUMAN RIGHTS AND FUNDAMENTAL FREEDOMS (ECHR) [Convention1998]. Its FIRST PROTOCOL, in Art. 3, secures the *Right to free elections*.

ECHR, FIRST PROTOCOL, Art. 3. *The High Contracting Parties undertake to hold free elections at reasonable intervals by secret ballot, under conditions which will ensure the free expression of the opinion of the people in the choice of the legislature.*

The Member States are party to the Convention, and Art. 6(2) of the LISBON TREATY [Lisbon2009] foresees that *The Union shall accede to the European Convention for the Protection of Human Rights and Fundamental Freedoms*. Hence European Parliament elections may also be viewed as being subjected to the Convention, as is emphasised by [Toplak2007].

The legal frame for European Parliament elections comprises two complementary aspects. Firstly, the legislation on the composition of the European Parliament fixes the number of representatives to be elected in each Member State. The national seat allotments are negotiated in accession treaties and treaties on the European Union, as reviewed in Subsection 2.1.

Secondly, the legal frame stipulates regulations on the allocation of seats among registered parties and independent candidates. On the European level, the essential document is the ACT CONCERNING THE ELECTION OF THE REPRESENTATIVES OF THE ASSEMBLY BY DIRECT UNIVERSAL SUFFRAGE as amended in 2002, hereafter quoted as EUROPEAN ELECTORAL ACT 2002 [EuropeanElectoralAct1976, EuropeanElectoralAct2002], see Subsection 2.2.

On the Member State level, national legislation comprises 27 national electoral provisions. The EUROPEAN ELECTORAL ACT 2002 lends substance to the AMSTERDAM TREATY [Amsterdam1999], in that the national electoral provisions must conform to *principles common to all Member States*, as detailed in Subsection 2.3.

2.1 EU documents on the composition of the European Parliament

The composition of the European Parliament, that is, the allotment of seats among its Member States, changes again and again. The Committee on Constitutional Affairs of the European Parliament continues to deal with the topic, see [INI/2009/2134]. National seat allotments are not determined by a useful formula, but emerge from negotiations. The version of June 2009 relied on the ACT CONCERNING THE CONDITIONS OF ACCESSION OF THE REPUBLIC OF BULGARIA AND ROMANIA AND THE ADJUSTMENTS TO THE TREATIES ON WHICH THE EUROPEAN UNION IS FOUNDED [Accession2005].

ACCESSION TREATY OF BULGARIA AND ROMANIA, Art. 9(1). *The number of Members of the European Parliament shall not exceed 736.*

ACCESSION TREATY OF BULGARIA AND ROMANIA, Art. 9(2). *The number of representatives elected in each Member State shall be as follows: see above Table 1.*

National seat allotments visibly are not in proportion to population. The imbalance is politically wanted, and is held justified so that each Member State is secured a minimum representation, while yet resulting in a parliament limited in size.

With the LISBON TREATY entering into force in December 2009, the total number of representatives will be raised by the end of the year 2010.

LISBON TREATY, Art. 14(2). *The European Parliament shall be composed of representatives of the Union's citizens. They shall not exceed seven hundred and fifty in number, plus the President. Representation of citizens shall be degressively proportional, with a minimum threshold of six members per Member State. No Member State shall be allocated more than ninety-six seats.*

While negotiating the allocation of the additional representatives, the European Council decided on the future composition. The numbers correlate with the proposal in the Lamassoure/Severin Report [LamassoureSeverin2007], except that Germany retains its 99 seats and the total number of seats is raised *from 736 to 754 until the end of the 2009–2014 legislative period* [Council2008]. Thus the numbers of representatives will be increased in twelve Member States, as shown above in Table 1. In some Member States the determination of the additional representatives is based on the 2009 election results, whereas in others they are appointed by the national parliament. Disagreement over the selection process persists. Therefore we do not consider the allocation of the additional seats, but restrict our attention to the 736 seats that were at stake during the June 2009 elections.

2.2 European Electoral Act of 1976

European legislation on the apportionment of seats among registered parties and independent candidates has its beginning in the TREATY ESTABLISHING THE EUROPEAN COAL AND STEEL COMMUNITY [ECSC1951]. Its Art. 21 regulated the allocation of seats within each Member State's allotment, and provoked proposals for a uniform electoral procedure.

ECSC 1951, Art. 21(1). *The Assembly shall consist of delegates ... designated by the respective Parliaments.*

ECSC 1951, Art. 21(2). *The number of these delegates shall be as follows: ...*

ECSC 1951, Art. 21(3). *The Assembly shall draw up proposals for elections by direct universal suffrage in accordance with a uniform procedure in all Member States.*

For almost twenty years, Art. 21(1) was in force and representatives were *designated by the respective Parliaments*. Only in 1976 the then European Communities reached an agreement on *proposals for elections by direct universal suffrage*, in the EUROPEAN ELECTORAL ACT 1976. Its Art. 7(2) enunciated the general principles on which the first European Parliament elections in 1979 were conducted.

EUROPEAN ELECTORAL ACT 1976, Art. 7(2). *Pending the entry into force of a uniform electoral procedure and subject to the other provisions of this Act, the electoral procedure shall be governed in each Member State by its national provisions.*

Every Member State drew up national provisions for the seat apportionment among registered parties and independent candidates. The mandate sustained, however, to draw up proposals for a uniform procedure. Over another eighteen years, the by then European Parliament could not agree on a uniform electoral procedure. To overcome the deadlock the mandate was moderated in 1997, such that the national electoral provisions shall at least conform to *principles common to all Member States*. This clause, in force to date, found its way into the LISBON TREATY.

LISBON TREATY, Art. 223(1). *The European Parliament shall draw up a proposal to lay down the provisions necessary for the election of its Members by direct universal suffrage in accordance with a uniform procedure in all Member States or in accordance with principles common to all Member States.*

The Treaty upholds the mandate to draw up a proposal on a uniform electoral procedure, now also tolerating national electoral provisions. The EUROPEAN ELECTORAL ACT 2002 specifies the *principles common to all Member States* that need to be adhered to. In the sequel we analyse how the 27 national provisions for the 2009 elections conform to these principles.

2.3 European Electoral Act as amended in 2002

History testifies to the complexity of the European Parliament elections. They are based on a multi-stage legislative process, with every Member State following its national electoral provisions. Only since the EUROPEAN ELECTORAL ACT 2002 these provisions are constraint to satisfy certain common principles. As for the seat allocation procedures, the provisions must be based on *proportional representation* (Art. 1(1)), a Member State *may establish constituencies ... or subdivide its electoral area* (Art. 2), and an electoral threshold that *may not exceed 5 per cent of votes cast* may be stipulated (Art. 2A).

EUROPEAN ELECTORAL ACT 2002, Art. 1(1). *In each Member State, members of the European Parliament shall be elected on the basis of proportional representation, using the list system or the single transferable vote.*

EUROPEAN ELECTORAL ACT 2002, Art. 2. *In accordance with its specific national situation, each Member State may establish constituencies for elections to the European Parliament or subdivide its electoral area in a different manner, without generally affecting the proportional nature of the voting system.*

EUROPEAN ELECTORAL ACT 2002, Art. 2A. *Member States may set a minimum threshold for the allocation of seats. At national level this threshold may not exceed 5 percent of votes cast.*

Details on the national provisions confronted us with numerous difficulties. The first is to get hold of the texts of the 27 provisions. There is a document of the scientific service of the European Parliament with a list of weblinks which, unfortunately, the author points out to be incomplete, see [Lehmann2009]. A complete list of weblinks is appended to this paper.

The second difficulty arises from the 23 official EU languages. To the best of our knowledge Austria, Belgium, Bulgaria, Cyprus, Germany, Spain, France, Greece, Italy, Luxembourg, and Portugal do not provide English translations of their national electoral provisions. The help of native speakers turns out to be indispensable, as we gratefully acknowledge.

The third difficulty lies in the wording of some of the sections in the provisions. In Sweden and Slovenia, it is not clear to us whether the thresholds are calculated relative to valid votes, or relative to votes cast, see Subsection 3.1. In the Slovak Republic, the notion of quotients being *rounded off* means standard rounding, as pointed out to us by the former head of the Slovak Statistical Office. The Greek provisions, hard to find and difficult to understand, are inaccurate due to antiquated language, as our Greek correspondent assured us comfortably.

Seventeen Member States entertain specific laws for the European Parliament elections: Austria, Belgium, Bulgaria, Czech Republic, Denmark, Estonia, France, Hungary, Italy, Latvia, Lithuania, Germany, Greece, Poland, Romania, Slovak Republic, and United Kingdom. On the other hand Spain, Finland, Luxembourg, Netherlands, and Sweden subsume the European electoral provisions into their national electoral laws. As a last group Cyprus, Ireland, Malta, Portugal, and Slovenia possess laws on the European Parliament elections which, however, contain cross-references to national electoral acts, in particular when it comes to the details of the apportionment procedures.

3 Implications for the apportionment procedures

Since 2002 the Member States must adopt national electoral provisions in *accordance with principles common to all Member States*. The principles leave a wide margin of appreciation. In order to work out how the Member States make use of their margin, we discuss the articles quoted in Subsection 2.3 in reverse order, first Art. 2A, then Art. 2, and finally Art. 1.

3.1 Electoral thresholds, and effective votes (Art. 2A)

The well-known electoral principle *One person, one vote* demands that all votes shall be treated equally. Yet, the imbalance in the number of representatives elected in the Member States entails that voters from smaller Member States have more power than voters from larger Member States. Even within a Member State one vote is not always equal to the other. We distinguish between *valid votes* and *invalid votes*. The definitions differ among Member States. For example, blank votes are valid in Spain, but invalid in Germany. Due to electoral thresholds, as permitted by Art. 2A, votes cast for parties or independent candidates with too small a support are discarded. We say that the retained votes are *effective*, while the discarded votes are *ineffective*. In the absence of any electoral threshold, all valid votes become effective.

To illustrate we take a closer look at Austria. The electorate consisted of 6 362 761 people. Of these, 2 925 132 cast their votes, while 3 437 629 did not. Of the votes cast, 2 864 621 were valid, while 60 511 were invalid. There is an electoral threshold of four percent relative to valid votes, resulting in a threshold of 114 585 votes. Hence, only votes cast for parties that gained at least 114 585 votes become effective. In total, 2 825 027 votes were effective, while 39 594 were ineffective. Only the effective votes were considered in the apportionment calculation. Thus the vote categories form a hierarchy, as follows:

6 362 761 electorate	=	2 925 132 votes cast	+	3 437 629 non-voters
2 925 132 votes cast	=	2 864 621 valid votes	+	60 511 invalid votes
2 864 621 valid votes	=	2 825 027 effective votes	+	39 594 ineffective votes

For 25 Member States, the effective votes provide the sole basis for the apportionment calculation. However, in Greece and Cyprus ineffective votes do play a role, though parties still must pass the threshold before they can be apportioned a seat.

Often the threshold equals a fixed percentage, referring either to valid votes, or else to votes cast. By way of illustration, the number of votes cast in Germany is 26 923 614. Five percent thereof yield a threshold of 1 346 181 votes. Of course, the number of valid votes is smaller, 26 333 444. Hence five percent thereof amount to a smaller threshold of just 1 316 672 votes. The example proves that a five percent threshold relative to valid votes is legitimate, as it does not exceed five percent of votes cast and hence obeys Art. 2A.

Ten Member States have no threshold whatsoever: Belgium, Denmark, Estonia, Finland, Ireland, Luxembourg, Malta, Netherlands, Portugal, and Spain. Thresholds relative to valid votes are applied in Cyprus (1.8 percent), Austria, France, and Italy (4 percent), Czech Republic, Hungary, Germany, Poland, and Slovak Republic (5 percent). Thresholds relative to votes cast are applied in Latvia and Lithuania (5 percent). In Slovenia and Sweden it is not clear to us whether the four percent thresholds are calculated relative to votes cast or relative to valid votes.

There remain four thresholds of a rather peculiar type. In Romania, the electoral provisions distinguish between a five percent threshold relative to valid votes for registered parties, and a lower threshold for independent candidates. In Italy, there is a four percent threshold relative to valid votes, though not applying to parties of ethnic minorities.

In Bulgaria and Lithuania the thresholds exceed five percent of votes cast, and thus violate Art. 2A. In Bulgaria the implicit threshold in 2009 amounts to 5.8 percent relative to votes cast. It does make a difference. If the threshold had been at five percent relative to votes cast, one party would have been retained and would have been assigned a seat. In Lithuania an implicit threshold emerges from the apportionment method. For the 2009 election it results in a 6.7 percent threshold relative to votes cast. Luckily, all parties pass either both thresholds, or none.

3.2 Single electoral area, and the establishment of constituencies (Art. 2)

With a view toward Art. 2 of the EUROPEAN ELECTORAL ACT 2002, four Member States choose to *establish constituencies . . . without affecting the proportional nature of the voting system*. Prior to the election, the available seats are allocated among several *constituencies*. After the election, the seat apportionment calculations are carried out separately for each constituency. Belgium establishes three constituencies, France eight, Ireland four, and United Kingdom twelve.

In 23 Member States the seat apportionment is carried out across the whole electoral area. Altogether the 2009 elections give rise to 50 apportionment calculations, of 23 single electoral areas, plus 3 constituencies in Belgium, 8 in France, 4 in Ireland, and 12 in the United Kingdom.

3.3 Subdivision into electoral districts, and electoral alliances (Art. 2)

Art. 2 of the EUROPEAN ELECTORAL ACT 2002 allows to subdivide the electoral area *in a different manner*. Subdivisions of the whole electoral area into several electoral districts occur in Germany, Italy, and Poland. Note that districts are distinct from constituencies. The number of representatives elected per district are determined dynamically, by the election results. Hence proportionality among parties is achieved across the entire electoral area. A two-step procedure is implemented to carry out the seat apportionment. The first step is the *super-apportionment*, allocating all available seats among parties according to their nationwide vote totals. The second step consists of several *sub-apportionments*, to apportion the nationwide party seats among the districts where the party campaigned.

The concept of a subdivision into several districts is closely related to the formation of electoral alliances, made use of in Denmark, Finland, and the Netherlands. Electoral alliances also call for a two-step procedure. The super-apportionment apportions the available seats among alliances and stand-alone parties. For each alliance, a sub-apportionment calculation is conducted to apportion the seats obtained among the members of the alliance.

In Denmark, Finland, Germany, and Italy, the methods for the super-apportionment and the sub-apportionments are the same. In the Netherlands and Poland, the methods differ.

3.4 Translation of votes into seats: Methods and systems (Art. 1)

According to Art. 1 of the EUROPEAN ELECTORAL ACT 2002, national electoral provisions must be built *on the basis of proportional representation*. Proportionality can be achieved by means of *apportionment methods* (also known as electoral formulas). These comprise divisor methods (also known as highest average formulas), or quota methods (also known as greatest remainder formulas). Proportionality can also be achieved by single transferable vote (STV) systems. As these cannot be explained by simple formulas, we refer to them as *systems* rather than *methods*.

Divisor methods (highest average formulas)	
DivDwn	Divisor method with rounding down (D'Hondt, Hagenbach-Bischoff, Jefferson)
DivStd	Divisor method with standard rounding (Sainte-Laguë, Webster)
Div0.7	Divisor method with modified standard rounding (Scandinavian method)
Quota methods (greatest remainders formulas)	
HaQgrR	Hare quota method with residual fit by greatest remainders
HQ1grR	Hare quota variant 1 with residual fit by greatest remainders
HQ2grR	Hare quota variant 2 with full-seat restricted residual apportionment gR2
HQ3grR	Hare quota variant 3 with residual fit by greatest remainders
HQ3grR3	Hare quota variant 3 with residual variant gR3
HQ3-EL	Hare quota variant 3 with Greek residual fit
DQ3grR	Droop quota variant 3 with residual fit by greatest remainders
Single transferable vote (STV) systems	
STVfra	Droop quota, and fractional transfer apportionment
STVran	Droop quota, and random transfer apportionment

Table 2: Apportionment procedures used in the 2009 elections. Divisor methods make use of a (flexible) divisor and a (fixed) rounding rule. Quota methods employ a (fixed) quota and a (flexible) residual fit. Single transferable vote systems are characterized by the transfer apportionment.

3.5 Divisor methods of apportionment

Divisor methods follow the motto *Divide and round*. Let h be the given *house size*, the number of representatives to be elected in a certain Member State or in a certain constituency. The effective votes are denoted by v_j where j designates a party or an independent candidate. Firstly, we divide the effective votes v_j by a feasible divisor D . Secondly, the resulting fractional quotients v_j/D are rounded by a pre-specified rounding rule to obtain an integer seat number. The divisor D is determined so as to allocate exactly h seats. Different rounding rules generate different divisor methods. The 2009 European Parliament elections employ three rounding rules: rounding down, standard rounding, and modified standard rounding.

Rounding down, $\lfloor \cdot \rfloor$. A positive number is rounded down to its integer part. Example: $\lfloor 3.45 \rfloor = 3$, $\lfloor 6.87 \rfloor = 6$. The *divisor method with rounding down* (DivDwn) is often named after *D'Hondt*, *Hagenbach-Bischoff*, or *Jefferson*.

Standard rounding, $\langle \cdot \rangle$. A positive number is rounded to the integer nearest to it. Example: $\langle 3.45 \rangle = 3$, $\langle 6.87 \rangle = 7$. The *divisor method with standard rounding* (DivStd) is often named after *Sainte-Laguë*, or *Webster*.

Modified standard rounding. Same as standard rounding, except that a number smaller than one is rounded down if below 0.7, and rounded up if above 0.7. The *divisor method with modified standard rounding* (Div0.7) is also referred to as the *Scandinavian method*.

The divisor may be interpreted as an *electoral key* providing access to the final seat numbers. Therefore we always display a divisor D , so that the method is captured by the phrase: *Each D votes yield about one seat.*

A feasible divisor D may be determined as follows. For every participant j the votes v_j are divided by *signposts* peculiar to the rounding rule specified, say $s(1), s(2), s(3)$, etc. The resulting quotients $v_j/s(1), v_j/s(2), v_j/s(3), \dots$, are taken to signify some sort of *averages*. They are ordered in decreasing size. Now seats are handed out, one by one until all seats are gone, to the participants with the highest averages. The last highest average used, and the first highest average not used define the *divisor interval*. Finally an arbitrary number may be picked from the divisor interval to be used as a divisor D .

The signposts $s(1), s(2), s(3)$, etc. are determined by the rounding rule specified. Rounding down comes with the sequence 1, 2, 3, etc. or, equivalently, with 2, 4, 6, etc. For this reason the method is also known as the *even-number method*. Standard rounding uses the signposts 0.5, 1.5, 2.5, etc. or, equivalently, 1, 3, 5, etc. This is why the method is also termed the *odd-number method*. Modified standard rounding uses the signposts 0.7, 1.5, 2.5, etc. or, equivalently, 1.4, 3, 5, etc.

In the 2009 European Parliament elections, 16 Member States applied the divisor method with rounding down: Austria, Belgium, Czech Republic, Denmark, Estonia, Finland, France, Hungary, Luxembourg, Netherlands, Poland, Portugal, Romania, Slovenia, Spain, and United Kingdom (except for the constituency of Northern Ireland). Germany and Latvia used the divisor method with standard rounding, and Sweden the divisor method with modified standard rounding.

3.6 Quota methods of apportionment

Quota methods are a family of apportionment methods that follow the motto *Divide and sort*. The apportionment method is split into a main apportionment that is based on a pre-specified quota Q . The seats apportioned in the main apportionment practically always fail to exhaust the house size h , leaving some r seats to be taken care of in the residual apportionment.

Main apportionment Determine the quota Q , and divide it into the effective votes v_j of participant j . The integer part of the resulting quotient, $\lfloor v_j/Q \rfloor$, signifies the number of seats apportioned in the main apportionment.

Residual apportionment The r residual seats are apportioned according to the remainders $v_j/Q - \lfloor v_j/Q \rfloor$. A prescription is specified to sort the participants, and to allocate the remaining r seats in the sequence of this sorting.

The 2009 European Parliament elections used the generic Hare quota HaQ, its four variants HQ1 through HQ4, and the Droop quota variants DQ3 and DQ4. They are defined as follows:

$$\begin{aligned}
 \text{HaQ} &= \frac{\text{effective votes}}{h}, & \text{DrQ} &= \left\lfloor \frac{\text{effective votes}}{h+1} \right\rfloor + 1, \\
 \text{HQ1} &= \left\lfloor \frac{\text{effective votes}}{h} \right\rfloor, & \text{DQ1} &= \max \left\{ \left\lfloor \frac{\text{effective votes}}{h+1} \right\rfloor, 1 \right\}, \\
 \text{HQ2} &= \left\lceil \frac{\text{effective votes}}{h} \right\rceil, & \text{DQ2} &= \left\lceil \frac{\text{effective votes}}{h+1} \right\rceil, \\
 \text{HQ3} &= \left\lfloor \frac{\text{valid votes}}{h} \right\rfloor, & \text{DQ3} &= \left\langle \frac{\text{effective votes}}{h+1} \right\rangle, \\
 \text{HQ4} &= \left\lceil \frac{\text{valid votes}}{h} \right\rceil, & \text{DQ4} &= \max \left\{ \left\lfloor \frac{\text{unused voting power}}{r+1} \right\rfloor, 1 \right\}.
 \end{aligned}$$

The generic Hare quota HaQ is the quotient of the effective vote total divided by the number of seats to be allotted. It is applied in Bulgaria, Netherlands (super- and sub-apportionments), and Poland (only sub-apportionments). The variant HQ1 is applied in Italy (super- and sub-apportionments). The variant HQ2 is applied in Lithuania. In Greece the main apportionment uses the variant HQ3. The variant HQ4 is applied in Bulgaria for the electoral threshold pertaining to parties, and in Romania for the electoral threshold pertaining to independent candidates.

Of the Droop quota family, only variant DQ3 is applied in the Slovak Republic, and variant DQ4 is applied in Greece in the course of the first part of the residual apportionment.

The fashion which remainders to consider and how to treat them for the allocation of the r residual seats, depends on the prescription specified. In the 2009 elections the *residual fit by greatest remainders* (grR) and its variants grR2 and grR3 are employed:

- grR All remainders are sorted by decreasing size.
- grR1 The r residual seats are given to the strongest party.
- grR2 Remainders are sorted by decreasing size, only of parties with Q votes or more.
- grR3 Remainders are sorted by decreasing size, of certain parties only (Greece).

The residual fit by greatest remainders (grR) is applied in Bulgaria, Cyprus, Italy, and Slovak Republic. Variant grR1 is not employed in the 2009 elections. Variant grR2 is used in Lithuania, to be referred to as the *full-seat restricted residual apportionment*. Variant grR3 is used in Greece.

3.7 Single transferable vote systems

Systems of single transferable vote obey the motto *Count and transfer*. Votes are cast for individual nominees. Moreover, voters indicate a transfer ranking. The apportionment procedure comes in two parts. The main apportionment checks whether the vote count reaches the Droop quota DrQ . The second part takes the form of a transfer apportionment.

Main apportionment Determine the Droop quota DrQ . Nominees whose votes reach the quota DrQ are awarded a seat.

Transfer apportionment If a nominee's votes exceed the quota DrQ the surplus votes are transferred to other nominees according to the voters' transfer ranking, with the larger surpluses transferred first. If no further nominees reach DrQ votes, the nominee with the fewest votes is eliminated and her votes are transferred.

The seats apportioned in the main apportionment stay far below h , leaving r residual seats. The voters' transfer ranking indicates to whom votes are to be transferred, if the nominee of their first, or subsequent, choice has already reached the quota Q . The same applies, if the nominee has obtained too few votes and has thus been eliminated, as is explained below.

There are two ways to conduct the transfer. The first way is to consider all ballot sheets and calculate fractional weightings to affect the transfer. The second way incorporates an element of randomness to decide which ballot sheets are to be transferred.

- STVfra All ballot sheets are transferred, with fractional weightings.
- STVran The ballot sheets of a nominee that has reached the quota or the ballot sheets of a nominee that has been eliminated, are sorted into sub-parcels with respect to the nominee next in the transfer ranking. In proportion to the sub-parcel's size, the ballot sheets that happen to be on top of each parcel are transferred to the next nominee.

In the 2009 European Elections, Northern Ireland uses the fractional part variant (STVfra), while Ireland and Malta apply the random transfer apportionment (STVran).

4 Apportionment procedures used in the 2009 elections

4.1 European parliamentary groups, and format of tables

Member States are sorted by their two-letter codes taken from [Styleguide2009]. In order to adjoin a European dimension and to substitute for the non-visible European party system, national parties are listed together with the European Parliament group to which they are affiliated, as recommended by [Schleicher2009]. Currently, the European Parliament features seven groups [Results2009], of which the sizes (in terms of number of seats), acronyms, and names are as follows:

European People's Party	EPP	265
Progressive Alliance of Socialists and Democrats	S&D	184
Alliance of Liberals and Democrats for Europe	ALDE	84
European Greens – European Free Alliance	EG-EFA	55
European Conservatives and Reformists	ECR	54
Europe of Freedom and Democracy	EFD	32
European United Left – Nordic Green Left	GUE-NGL	35
Non-attached members of the European Parliament	NA	27

In our tables the first column lists the names of the political parties, independent candidates, or nominees. Separated by a colon ":" we append the parliamentary group to which the party is affiliated. The second column shows effective votes.

The third column displays quotients. In case of divisor methods, it is the quotient of effective votes divided by the divisor D displayed in the bottom line. For example, in Austria the ÖVP-quotient is $858\,921/140\,000 = 6.14$. In case of quota methods, it is the quotient of effective votes divided by the quota Q quoted in the bottom line. For example, in Bulgaria the ГЕПB-quotient is $627\,693/128\,619 = 4.880$.

The fourth column displays final seat numbers. For divisor methods, the quotients in the third column are rounded according to the applicable rounding rule to obtain the seat numbers. For quota methods, the remainders that are awarded an additional seat beyond the main apportionment are printed in bold-face type.

Of the 27 Member States 19 use a divisor method, six a quota method, and two a single transferable vote system. In case a Member State establishes several constituencies, the pertinent calculations are displayed one after the other. For two-step systems, the vote counts that are subjected to a sub-apportionment calculation, together with the corresponding divisor or quota, are printed in italic type.

STV systems are more difficult to monitor. For this reason we include first preferential votes only, and indicate whether a nominee is awarded a seat or not. Note that elected nominees may have fewer first preferential votes than non-elected nominees.

4.2 Survey of the 27 Member States

AT – Republic of Austria

Austria allocates its 17 seats across the whole electoral area. There is a four percent threshold relative to valid votes. The divisor method with rounding down is used, DivDwn.

There are 2864621 valid votes. Four percent thereof is 114584.8. Six parties gain at least 114585 votes, and participate in the apportionment calculation. This leaves 39594 ineffective votes, cast for two parties. From the divisor interval [136 009; 142 252] we use divisor 140 000.

EP2009AT	Votes	Quotient	DivDwn
ÖVP:EPP	858 921	6.14	6
SPÖ:S&D	680 041	4.86	4
Martin:NA	506 092	3.61	3
FPÖ:NA	364 207	2.60	2
GRÜNE:EG-EFA	284 505	2.03	2
BZÖ:NA	131 261	0.94	0
Sum [Divisor]	2 825 027	[140 000]	17

BE – Kingdom of Belgium

Belgium allocates its 22 seats in three contituenices. There is no electoral threshold. The national electoral provisions allot 13 seats to the *Nederlands kiescollege*, 8 seats to the *Collège électoral français*, and 1 seat to the *Deutschsprachiges Wahlkollegium*. All constituencies use the divisor method with rounding, DivDwn.

(1) The *Nederlands kiescollege* has divisor interval [237 031; 269 696], we use divisor 250 000. (2) The *Collège électoral français* has divisor interval [213 364; 238 315], we use divisor 230 000. (3) The *Deutschsprachiges Wahlkollegium* has divisor interval [7 878; 12 475], we use divisor 10 000.

EP2009BE	Votes	Quotient	DivDwn
(1) <i>Nederlands kiescollege</i>			
CD&V:EPP	948 123	3.79	3
Open Vld:ALDE	837 884	3.35	3
Vlaams Belang:NA	647 170	2.59	2
sp.a:S&D	539 393	2.16	2
N-VA:EG-EFA	402 545	1.61	1
GROEN!:EG-EFA	322 149	1.29	1
Lijst Dedecker:ECR	296 699	1.19	1
PVDA+:NA	40 057	0.16	0
SLP:EG-EFA	26 541	0.11	0
LSP:NA	8 985	0.04	0
CAP:NA	6 398	0.03	0
Sum [Divisor]	4 075 944	[250 000]	13
(2) <i>Collège électoral français</i>			
PS:S&D	714 947	3.11	3
MR:ALDE	640 092	2.78	2
ECOLO:EG-EFA	562 081	2.44	2
CDH:EPP	327 824	1.43	1
FN:NA	87 706	0.38	0
WALLONIE D'ABORD:NA	37 505	0.16	0
R.W.F.:NA	30 488	0.13	0
PTB+:NA	28 483	0.12	0
LCR-PSL:NA	7 954	0.03	0
CAP D'ORAZIO:NA	7 626	0.03	0
PC-GE:NA	7 533	0.03	0
MS:NA	4 939	0.02	0
Sum [Divisor]	2 457 178	[230 000]	8
(3) <i>Deutschsprachiges Wahlkollegium</i>			
CSP:EPP	12 475	1.25	1
PFF:ALDE	7 878	0.79	0
ECOLO:EG-EFA	6 025	0.60	0
PS:S&D	5 658	0.57	0
ProDG:NA	3 897	0.39	0
VIVANT:NA	2 417	0.24	0
EdW:NA	330	0.03	0
Sum [Divisor]	38 680	[10 000]	1

BG – Republic of Bulgaria

Bulgaria allocates its 17 seats across the whole electoral area. The implicit electoral threshold is determined by variant 4 of the Hare quota, $HQ4 = \lceil \text{valid votes}/h \rceil$. The Hare quota HaQ with residual fit by greatest remainders is used, $HaQgrR$.

There are 2 576 434 valid votes. The threshold is $HQ4 = \lceil 2\,576\,434/17 \rceil = 151\,555$. Six parties pass the threshold and participate in the apportionment calculation. This leaves 389 911 ineffective votes, cast for another six parties. The quota happens to be an integer, $HaQ = 2\,186\,523/17 = 128\,619$.

However, the threshold of 151 555 votes amounts to 5.8 percent of the 2 601 677 votes cast. This is in violation of Art. 2A of the *European Electoral Act 2002*. If the threshold were five percent relative to votes cast, that is 130 084 votes, the 146 984 votes for ПП "ЛИДЕР" would not have been disposed of, but would have been apportioned a seat (at the expense of НДСВ).

EP2009BG	Votes	Quotient	HaQgrR
ГЕРБ:ЕРР	627 693	4.880	5
КОАЛИЦИЯ ЗА БЪЛГАРИЯ:С&D	476 618	3.706	4
ДПС:ALDE	364 197	2.832	3
АТАКА:NA	308 052	2.395	2
НДСВ:ALDE	205 146	1.595	2
СИНЯТА КОАЛИЦИЯ:ЕРР	204 817	1.592	1
Sum [Quota]	2 186 523	[128 619]	17

CY – Republic of Cyprus

Cyprus allocates its 6 seats across the whole electoral area. There is a 1.8 percent threshold relative to valid votes. Variant 3 of the Hare quota with residual fit by greatest remainders is used, $HQ3grR$.

There are 306 325 valid votes. The threshold amounts to $\lceil 5\,513.85 \rceil = 5\,514$. Five parties pass the threshold and participate in the apportionment calculation. This leaves 9 770 ineffective votes, cast for eight parties. The quota is $HQ3 = \lceil 306\,325/6 \rceil = \lceil 51\,054.17 \rceil = 51\,054$.

EP2009CY	Votes	Quotient	HQ3grR
DISY:EPP	109 209	2.14	2
AKEL:GUE-NGL	106 922	2.09	2
DIKO:ALDE	37 625	0.74	1
EDEK:С&D	30 169	0.59	1
EVROKO:ALDE	12 630	0.25	0
Ineffective votes	9 770	—	—
Sum [Quota]	306 325	[51 054]	6

CZ – Czech Republic

The Czech Republic allocates its 22 seats across the whole electoral area. There is a five percent threshold relative to valid votes. The divisor method with rounding down is used, $DivDwn$.

There are 2 358 934 valid votes. Five percent thereof is 117 946.7. Four parties gained 177 947 or more votes, and participate in the apportionment calculation. This leaves 573 828 ineffective votes, cast for 29 parties. From the divisor interval [74 194.6; 75 447.4] we use divisor 75 000.

EP2009CZ	Votes	Quotient	DivDwn
Občanská demokratická strana:ECR	741 946	9.89	9
Česká str.sociálně demokrat.:S&D	528 132	7.04	7
Komunistická str.Čech a Moravy:GUE-NGL	334 577	4.46	4
Křesť.demokr.unie-Čs.str.lid.:EPP	180 451	2.41	2
Sum [Divisor]	1 785 106	[75 000]	22

DE – Federal Republic of Germany

Germany allocates its 99 seats across the whole electoral area. There is a five percent threshold relative to valid votes. The *Christlich Demokratische Union* (CDU) presented 15 district lists for a sub-apportionment. The divisor method with standard rounding is used throughout, DivStd.

There are 26 333 444 valid votes nationwide. Five percent thereof is 1 316 672.2. Six parties pass the threshold, and participate in the apportionment calculation. This leaves 2 840 893 ineffective votes, cast for 26 parties. The super-apportionment has divisor interval [233 954; 236 630], we use divisor 235 000. In the CDU sub-apportionment, the divisor interval is [238 752; 246 111], we use divisor 240 000.

EP2009DE	Votes	Quotient	DivStd	Quotient	DivStd
CDU:EPP [Divisor]	8 071 391	34.35	34	[240 000]	
= Nordrhein-Westfalen	2 091 945			8.72	9
+ Baden-Württemberg	1 478 135			6.16	6
+ Niedersachsen	962 510			4.01	4
+ Rheinland-Pfalz	660 252			2.75	3
+ Hessen	596 878			2.49	2
+ Sachsen	567 231			2.36	2
+ Schleswig-Holstein	308 368			1.28	1
+ Thüringen	304 858			1.27	1
+ Sachsen-Anhalt	213 731			0.89	1
+ Berlin	208 395			0.87	1
+ Mecklenburg-Vorpommern	201 447			0.84	1
+ Sachsen	162 696			0.68	1
+ Brandenburg	140 616			0.59	1
+ Hamburg	128 443			0.54	1
+ Bremen	45 886			0.19	0
SPD:S&D	5 472 566	23.29	23		
Grüne:EG-EFA	3 194 509	13.59	14		
FDP:ALDE	2 888 084	12.29	12		
Linke:GUE-NGL	1 969 239	8.38	8		
CSU:EPP	1 896 762	8.07	8		
Sum [Divisor]	23 492 551	[235 000]	99		

DK – Kingdom of Denmark

Denmark allocates its 13 seats across the whole electoral area, without an electoral threshold. There are three electoral alliances. The super-apportionment and the three sub-apportionments use the divisor method with rounding down, DivDwn.

The divisor interval for the super-apportionment turns out to be [157 008; 162 522], we use divisor 160 000. In the sub-apportionments, *Alliance 1* has divisor interval [123 868; 125 859], we use divisor 125 000. *Alliance 2* has interval [148 600; 158 013], we use 150 000. *Alliance 3* has interval [84 277.5; 168 555], we use 100 000.

EP2009DK	Votes	Quotient	DivDwn	Quotient	DivDwn
Alliance 1 [Divisor]	975 136	6.09	6	[125 000]	
= <i>Socialdemokratiet:S&D</i>	503 439			4.03	4
+ <i>Socialistisk Folkeparti:EG-EFA</i>	371 603			2.97	2
+ <i>Radikale Venstre:NA</i>	100 094			0.80	0
Alliance 2 [Divisor]	785 036	4.91	4	[150 000]	
= <i>Venstre:ALDE</i>	474 041			3.16	3
+ <i>Konservative Folkeparti:EPP</i>	297 199			1.98	1
+ <i>Liberal Alliance:NA</i>	13 796			0.09	0
Dansk Folkeparti:ECR	357 942	2.24	2		
Alliance 3 [Divisor]	224 014	1.40	1	[100 000]	
= <i>Folkebevægelsen mod EU:GUE-NGL</i>	168 555			1.69	1
+ <i>JuniBevægelsen:NA</i>	55 459			0.55	0
Sum [Divisor]	2 342 128	[160 000]	13		

EE – Republic of Estonia

Estonia allocates its 6 seats across the whole electoral area. There is no electoral threshold. The divisor method with rounding down is used, DivDwn.

The divisor interval turns out to be [34 502; 34 508], we use divisor 34 505. The independent candidate Indrek Tarand drew 102 460 votes; had he handed in a list, he would have been assigned two seats. But he did not, whence his 102 460 votes are apportioned just a single seat for him.

EP2009EE	Votes	Quotient	DivDwn
KESK:ALDE	103 506	2.9997	2
Indrek Tarand:EG-EFA	102 460	—	1
REF:ALDE	60 877	1.7643	1
IRL:EPP	48 492	1.4054	1
SDE:S&D	34 508	1.0001	1
ROH:EG-EFA	10 851	0.3145	0
Hel:NA	9 832	0.2849	0
RL:ECR	8 860	0.2568	0
Kle:NA	7 137	0.2068	0
EÜP:EG-EFA	3 519	0.1020	0
LIB:EFD	2 206	0.0639	0
EKD:NA	1 715	0.0497	0
VEE:NA	1 267	0.0367	0
PK:NA	612	0.0177	0
Žur:NA	585	0.0170	0
Õig:NA	292	0.0085	0
Aas:NA	263	0.0076	0
Sum [Divisor]	396 982	[34 505]	6

EL – Hellenic Republic

Greece allocates its 22 seats across the whole electoral area. There is a three percent threshold relative to valid votes. The apportionment calculations combine the Hare quota variant HQ3 with a rather unique split residual apportionment, which we abbreviate by HQ3-EL where EL is reminiscent of Greece.

For a party j , let v_j designate its votes, and x_j its number of seats apportioned in the main apportionment. The residual apportionment has an initial part, and a terminal part. The initial residual apportionment relies on the *unused voting power* $UVP_j = v_j - x_j \cdot \text{HQ3}$, that is, the number of votes beyond those already having been awarded their HQ3 share. The unused voting power UVP_j is divided by the Droop quota variant DQ4 and rounded down, to obtain an initial increment y_j . The terminal residual apportionment only admits parties not having received a

seat in the initial residual apportionment (that is, $y_j = 0$), and uses the greatest remainder variant gR3 to obtain terminal increments z_j .

There are 5 127 537 valid votes. Three percent thereof is 153 826.1. Six parties pass the threshold, and participate in the apportionment calculation. This leaves 377 997 ineffective votes, cast for 21 parties. For the main apportionment, the quota is $HQ3 = \lfloor 5\,127\,537/22 \rfloor = 233\,069$. The initial part of the residual apportionment uses $DQ4 = \lfloor (\text{total UVP})/(4 + 1) \rfloor = \lfloor 932\,295/5 \rfloor = 186\,459$.

EP2009EL	Votes	Quotient	Main	UVP	Quotient	HQ3-EL
Pa.So.K:S&D	1 878 982	8.06	8	14 430	0.08	8
ND:EPP	1 655 722	7.10	7	24 239	0.13	8
K.K.E.:GUE-NGL	428 282	1.84	1	195 213	1.—	2
La.O.S:EFD	366 637	1.57	1	133 568	0.72	2
Sy.Riz.A:GUE-NGL	240 930	1.03	1	7 861	0.04	1
OP:EG-EFA	178 987	0.77	0	178 987	0.96	1
Sum [Quota]	4 749 540	[233 069]	18	932 295	[186 459]	22

ES – Kingdom of Spain

Spain allocates its 50 seats across the whole electoral area. There is no electoral threshold. The divisor method with rounding down is used, DivDwn.

The divisor interval is $[279\,172; 290\,010]$, we use divisor 280 000.

EP2009ES	Votes	Quotient	DivDwn
PP:EPP	6 670 232	23.82	23
PSOE:S&D	6 141 784	21.93	21
CEU:ALDE	808 246	2.89	2
IU-ICV-EUiA-BA:GUE-NGL,EG-EFA	588 248	2.10	2
UPyD:NA	451 866	1.61	1
Edp-V:EG-EFA	394 938	1.41	1
II:NA	178 121	0.64	0
LV-GVE:NA	89 147	0.32	0
PACMA:NA	41 913	0.15	0
PUM+J:NA	24 507	0.09	0
Libertas:EFD	22 903	0.08	0
IZAN-RG:NA	19 880	0.07	0
AES:NA	19 583	0.07	0
PCPE:NA	15 221	0.05	0
PSA:NA	13 993	0.05	0
POSI:NA	12 344	0.04	0
PFyV:NA	10 456	0.04	0
CDS:NA	10 144	0.04	0
FE de las JONS:NA	10 031	0.04	0
DN:NA	9 950	0.04	0
iF:NA	9 721	0.03	0
FN:NA	7 970	0.03	0
RC:NA	7 547	0.03	0
PH:NA	7 009	0.03	0
UV:NA	6 072	0.02	0
MSR:NA	6 009	0.02	0
SAIn:NA	5 877	0.02	0
CDL:NA	5 733	0.02	0
FA:NA	5 165	0.02	0
Extremadura Unida:NA	5 007	0.02	0
PREPAL:NA	4 767	0.02	0
UCE:NA	3 483	0.01	0
UNA:NA	3 183	0.01	0
AA:NA	2 255	0.01	0
UCL:NA	1 991	0.01	0
Sum [Divisor]	15 615 296	[280 000]	50

FI – Republic of Finland

Finland allocates its 13 seats across the whole electoral area, without an electoral threshold. There is one electoral alliance. The super-apportionment uses the divisor method with rounding down, DivDwn. In the sub-apportionment, seats are apportioned according to preferential votes cast for the candidates.

The super-apportionment has divisor interval [98 690; 101 453], we use divisor 100 000. In the sub-apportionment of *Alliance 1* (*Perussuomalaiset* + *Kristillisdemokraatit*) seats are apportioned to the candidates with the most votes. The two strongest candidates of *Perussuomalaiset* received 130 715 and 9 374 votes, the strongest candidate of the *Kristillisdemokraatit* won 53 803 votes. Therefore either party is apportioned one seat.

EP2009FI	Votes	Quotient	DivDwn
Kansallinen Kokoomus:EPP	386 416	3.86	3
Suomen Keskusta:ALDE	316 798	3.17	3
Sosialidemokraattinen:S&D	292 051	2.92	2
Alliance 1	232 388	2.32	2
= <i>Perussuomalaiset</i> :EFD	162 930	—	1
+ <i>Kristillisdemokraatit</i> :EPP	69 458	—	1
Vihreä liitto:EG-EFA	206 439	2.06	2
Ruotsalainen kansanpuolue:ALDE	101 453	1.01	1
Vasemmistoliitto:GUE-NGL	98 690	0.99	0
Liisa Sulkakoski:NA	8 463	0.08	0
Suomen Kommunistinen :NA	8 089	0.08	0
Köyhien Asialla:NA	4 338	0.04	0
Itsenäisyyspuolue:NA	3 563	0.04	0
Suomen Työväenpuolue STP:NA	3 169	0.03	0
Suomen Senioripuolue:NA	2 974	0.03	0
Sum [Divisor]	1 664 831	[100 000]	13

FR – French Republic

France allocates its 72 seats in eight constituencies. The national electoral provisions allot the seats as follows: *Nord-Ouest* 10, *Ouest* 9, *Est* 9, *Sud-Ouest* 10, *Sud-Est* 13, *Massif-Central/Centre* 5, *Ile-de-France* 13, and *Outre-Mer* 3. There is a threshold of five percent relative to valid votes (*voix exprimées*) calculated separately within each constituency. In all instances the divisor method with rounding down is used, DivDwn.

The divisors show that, in the seven mainland constituencies, representation is roughly in proportion to population. The smaller divisor in *Outre-Mer* serves to secure over-representation of the non-European territories.

(1) In the *Nord-Ouest* constituency, there are 2 484 140 valid votes. Five percent thereof is 124 207. Seven parties pass the threshold and participate in the apportionment calculation. This leaves 350 201 ineffective votes, cast for eleven parties. The divisor interval is [150 290; 150 389], we use 150 300.

(2) In the *Ouest* constituency, there are 2 506 694 valid votes. Five percent thereof is 125 334.7. Six parties pass the threshold, and participate in the apportionment calculation. This leaves 376 505 ineffective votes, cast for 14 parties. The divisor interval is [170 208; 208 724], we use divisor 200 000.

(3) In the *Est* constituency, there are 2 174 901 valid votes. Five percent thereof is 108 745.1. Six parties pass the threshold, and participate in the apportionment calculation. This leaves 361 599 ineffective votes, cast for 13 parties. The divisor interval is [155 310; 158 754], we use divisor 157 000.

(4) In the *Sud-Ouest* constituency, there are 2 625 075 valid votes. Five percent thereof is 131 253.8. Seven parties pass the threshold, and participate in the apportionment calculation. This leaves 295 418 ineffective votes, cast for 17 parties. The divisor interval is [155 806; 176 475], we use divisor 170 000.

(5) In the *Sud-Est* constituency, there are 2 939 639 valid votes. Five percent thereof is 146 982.0. Six parties pass the threshold, and participate in the apportionment calculation. This leaves 473 988 ineffective votes, cast for 15 parties. The divisor interval is [143 760; 172 511], we use divisor 160 000.

(6) In the *Massif-Central/Centre* constituency, there are 1 342 249 valid votes. Five percent thereof is 67 112.5. Seven parties pass the threshold, and participate in the apportionment calculation. This leaves 179 110 ineffective votes, cast for 13 parties. The divisor interval is [119 403; 127 544], we use divisor 120 000.

(7) In the *Ile-de-France* constituency, there are 2 798 120 valid votes. Five percent thereof is 139 906. Five parties pass the threshold, and participate in the apportionment calculation. This leaves 591 147 ineffective votes, cast for 22 parties. The divisor interval is [138 029; 145 922], we use divisor 140 000.

(8) In the *Outre-Mer* constituency, there are 347 796 valid votes. Five percent thereof is 17 389.8. Five parties pass the threshold, and participate in the apportionment calculation. This leaves 12 101 ineffective votes, cast for six parties. The divisor interval is [56 502; 70 514], we use divisor 60 000.

EP2009FR	Votes	Quotient	DivDwn
(1) <i>Nord-Ouest</i>			
LMAJ:EPP	601 556	4.00	4
LSOC:S&D	449 533	2.99	2
LVEC:EG-EFA	300 579	2.00	1
LFN:NA	253 009	1.68	1
LCMD:ALDE	215 482	1.43	1
LCOP:GUE-NGL	169 813	1.13	1
LEXG:NA	143 967	0.96	0
Sum [Divisor]	2 133 939	[150 300]	10
(2) <i>Ouest</i>			
LMAJ:EPP	680 829	3.40	3
LSOC:S&D	433 309	2.17	2
LVEC:EG-EFA	417 449	2.09	2
LDVD:efd	257 437	1.29	1
LCMD:ALDE	212 524	1.06	1
LEXG:NA	128 641	0.64	0
Sum [Divisor]	2 130 189	[200 000]	9
(3) <i>Est</i>			
LMAJ:EPP	635 016	4.04	4
LSOC:S&D	374 971	2.39	2
LVEC:EG-EFA	310 620	1.98	1
LCMD:ALDE	205 256	1.31	1
LFN:NA	164 672	1.05	1
LEXG:NA	122 767	0.78	0
Sum [Divisor]	1 813 302	[157 000]	9
(4) <i>Sud-Ouest</i>			
LMAJ:EPP	705 900	4.15	4
LSOC:S&D	465 076	2.74	2
LVEC:EG-EFA	415 457	2.44	2
LCMD:ALDE	225 917	1.33	1
LCOP:GUE-NGL	214 079	1.26	1
LFN:NA	155 806	0.92	0
LEXG:NA	147 422	0.87	0
Sum [Divisor]	2 329 657	[170 000]	10

EP2009FR (<i>continued</i>)	Votes	Quotient	DivDwn
(5) <i>Sud-Est</i>			
LMAJ:EPP	862 556	5.39	5
LVEC:EG-EFA	537 151	3.36	3
LSOC:S&D	426 043	2.66	2
LFN:NA	249 695	1.56	1
LCMD:ALDE	216 630	1.35	1
LCOP:GUE-NGL	173 576	1.08	1
Sum [Divisor]	2 465 651	[160 000]	13
(6) <i>Massif-Central/Centre</i>			
LMAJ:EPP	382 632	3.19	3
LSOC:S&D	238 806	1.99	1
LVEC:EG-EFA	182 311	1.52	1
LCMD:ALDE	109 369	0.91	0
LCOP:GUE-NGL	108 194	0.90	0
LEXG:NA	73 162	0.61	0
LFN:NA	68 665	0.57	0
Sum [Divisor]	1 163 139	[120 000]	5
(7) <i>Ile-de-France</i>			
LMAJ:EPP	828 172	5.92	5
LVEC:EG-EFA	583 690	4.17	4
LSOC:S&D	379 908	2.71	2
LCMD:ALDE	238 341	1.70	1
LCOP:GUE-NGL	176 862	1.26	1
Sum [Divisor]	2 206 973	[140 000]	13
(8) <i>Outre-Mer</i>			
LMAJ:EPP	103 247	1.72	1
LDVG:GUE-NGL	73 110	1.22	1
LSOC:S&D	70 514	1.18	1
LVEC:EG-EFA	56 502	0.94	0
LCMD:ALDE	32 322	0.54	0
Sum [Divisor]	335 695	[60 000]	3

HU – Republic of Hungary

Hungary allocates its 22 seats across the whole electoral area. There is a five percent threshold relative to valid votes. The divisor method with rounding down is used, DivDwn.

There are 2 896 179 valid votes. Five percent thereof is 144 808.95. Hence the threshold requires at least 144 809 votes, or more than 144 808 votes (the number quoted by the electoral office website [HU]). Four parties pass the threshold, and participate in the apportionment calculation. This leaves 179 297 ineffective votes, cast for four parties. The divisor interval is [108 821; 116 593], we use divisor 110 000.

EP2009HU	Votes	Quotient	DivDwn
FIDESZ:EPP	1 632 309	14.84	14
MSZP:S&D	503 140	4.57	4
JOBBIK:NA	427 773	3.89	3
MDF:ECR	153 660	1.40	1
Sum [Divisor]	2 716 882	[110 000]	22

IE – Ireland

Ireland allocates its 12 seats in four constituencies. Proportionally to population, the national provisions allot three seats each to the four constituencies *Dublin*, *East*, *North-West*, and *South*. The single transferable vote (STV) system with random vote transfer is used throughout, STVran.

The Droop quotas DrQ are $\lfloor 406\,630/(3+1) \rfloor + 1 = 101\,658$ for the constituency of *Dublin*, $\lfloor 429\,249/(3+1) \rfloor + 1 = 107\,313$ for *East*, $\lfloor 495\,307/(3+1) \rfloor + 1 = 123\,827$ for *North-West*, and $\lfloor 498\,127/(3+1) \rfloor + 1 = 124\,532$ for *South*. For more details see [IE].

EP2009IE		1st Pref	STVran
(1) <i>Dublin</i>			
Gay Mitchell	Fine Gael:EPP	96 715	1
Proinsias de Rossa	Labour:S&D	83 471	1
Eoin Ryan Jnr	Fianna Fáil:ALDE	55 346	0
Joe Higgins	Socialist:GUE-NGL	50 510	1
Mary Lou McDonald	Sinn Féin:GUE-NGL	47 928	0
Deirdre de Burca	Green/Comhaontas Glas:EG-EFA	19 086	0
Eibhlin Byrne	Fianna Fáil:ALDE	18 956	0
Patricia McKenna	Independent:NA	17 521	0
Caroline Simons	Libertas:EFD	13 514	0
Emmanuel Sweeney	Independent:NA	3 583	0
Sum [Quota]	[101 658]	406 630	3
(2) <i>East</i>			
Mairead McGuinness	Fine Gael:EPP	110 366	1
Liam Aylward	Fianna Fáil:ALDE	74 666	1
Nessa Childers	Labour:S&D	78 338	1
John Paul Phelan	Fine Gael:EPP	61 851	0
Kathleen Funchion	Sinn Féin:GUE-NGL	26 567	0
Thomas Byrne	Fianna Fáil:ALDE	31 112	0
Tomas Sharkey	Sinn Féin:GUE-NGL	20 932	0
Ray O'Malley	Libertas:EFD	18 557	0
Paddy Garvey	Independent:NA	2 934	0
Jim Tallon	Independent:NA	2 412	0
Micheal E Grealy	Independent:NA	1 514	0
Sum [Quota]	[107 313]	429 249	3
(3) <i>North-West</i>			
Marian Harkin	Independent:ALDE	84 813	1
Pat Gallagher	Fianna Fáil:ALDE	82 643	1
Jim Higgins	Fine Gael:EPP	80 093	1
Declan Ganley	Libertas:EFD	67 638	0
Padraig MacLochlainn	Sinn Féin:GUE-NGL	45 515	0
Paschal Mooney	Fianna Fáil:ALDE	42 985	0
Joe O'Reilly	Fine Gael:EPP	37 564	0
Susan O'Keeffe	Labour:S&D	28 708	0
Michael McNamara	Independent:NA	12 744	0
Fiachra O Luain	Independent:NA	6 510	0
John Higgins	Independent:NA	3 030	0
Noel McCullagh	Independent:NA	1 940	0
Tom R King	Independent:NA	1 124	0
Sum [Quota]	[123 827]	495 307	3
(4) <i>South</i>			
Brian Crowley	Fianna Fáil:ALDE	118 258	1
Sean Kelly	Fine Gael:EPP	92 579	1
Alan Kelly	Labour:S&D	64 152	1
Kathy Sinnott	Independent:NA	58 485	0
Toireasa Ferris	Sinn Féin:GUE-NGL	64 671	0
Colm Burke	Fine Gael:EPP	53 721	0
Ned O'Keeffe	Fianna Fáil:ALDE	16 596	0
Dan Boyle	Green/Comhaontas Glas:EG-EFA	15 499	0
Alexander Stafford	Independent:NA	11 692	0
Maurice Sexton	Independent:NA	2 474	0
Sum [Quota]	[124 532]	498 127	3

IT – Italian Republic

Italy allocates its 72 seats across the whole electoral area, subdivided into five electoral districts. There is a four percent threshold relative to valid votes. All apportionment calculations use the Hare quota variant HQ1 with residual fit by greatest remainders, HQ1grR.

Minority parties may register an electoral alliance with parties that campaign in all districts. In 2009, the *Südtiroler Volkspartei* (SVP) is allied with the *Partito democratico*, the *Vallee d'Aoste* with *Il Popolo della libertà*, and *Autonomie liberté et démocratie* with *Di Pietro Italia dei Valori*. A minority party is guaranteed a seat provided its top candidate wins at least 50 000 votes. In 2009 this clause applied to Herbert Dorfmann (SVP) only, with 84 361 votes.

The valid votes of the five districts total 30 615 364. The website of the Ministry of the Interior quotes 30 623 840 valid votes. Four percent of 30 615 364 is 1 224 614.5. Five parties pass the threshold. Together with the three allied minority parties, eight parties participate in the apportionment calculation. This leaves 4 049 147 ineffective votes, cast for another eight parties.

The HQ1 quota for the super-apportionment is $\lfloor 26\,566\,217/72 \rfloor = 368\,975$. The HQ1 quotas for the sub-apportionments are $\lfloor 10\,828\,525/29 \rfloor = 373\,397$ for *Il Popolo della libertà*, $\lfloor 8\,140\,766/22 \rfloor = 370\,034$ for *Partito democratico*, $\lfloor 3\,125\,418/9 \rfloor = 347\,268$ for *Lega Nord*, $\lfloor 2\,476\,695/7 \rfloor = 353\,813$ for *Di Pietro Italia dei Valori*, and $\lfloor 1\,994\,813/5 \rfloor = 398\,962$ for *Unione di Centro*.

EP2009IT	Votes	Quotient	HQ1grR	Quotient	HQ1grR
Il Popolo della libertà:EPP [<i>Quota</i>]	10 828 525	29.35	29	$\lfloor 373\,397 \rfloor$	
= <i>Nord-Occidentale+Vallee d'Aoste</i>	2 935 126			7.77	8
+ <i>Italia Meridionale</i>	2 869 765			7.69	8
+ <i>Italia Centrale</i>	2 344 306			6.28	6
+ <i>Nord-Orientale</i>	1 777 869			4.76	5
+ <i>Italia Insulare</i>	901 459			2.41	2
Partito democratico:S&D [<i>Quota</i>]	8 140 766	22.06	22	$\lfloor 370\,034 \rfloor$	
= <i>Italia Centrale</i>	2 030 062			5.49	6
+ <i>Nord-Occidentale</i>	2 002 790			5.41	5
+ <i>Nord-Orientale+SVP</i>	1 915 846			5.18	5
+ <i>Italia Meridionale</i>	1 575 928			4.26	4
+ <i>Italia Insulare</i>	616 140			1.67	2
Lega Nord:EFD [<i>Quota</i>]	3 125 418	8.47	9	$\lfloor 347\,268 \rfloor$	
= <i>North West</i>	1 684 842			4.85	5
+ <i>Nord-Orientale</i>	1 204 785			3.47	3
+ <i>Italia Centrale</i>	186 988			0.54	1
+ <i>Italia Meridionale</i>	39 521			0.11	0
+ <i>Italia Insulare</i>	9 282			0.03	0
Di Pietro Italia dei Valori:ALDE [<i>Quota</i>]	2 476 695	6.71	7	$\lfloor 353\,813 \rfloor$	
= <i>Italia Meridionale</i>	688 368			1.95	2
+ <i>Nord-Occidentale+Aut. lib. et démo.</i>	663 495			1.88	2
+ <i>Italia Centrale</i>	483 471			1.37	1
+ <i>Nord-Orientale</i>	454 801			1.29	1
+ <i>Italia Insulare</i>	186 560			0.53	1
Unione di Centro:EPP [<i>Quota</i>]	1 994 813	5.41	5	$\lfloor 398\,962 \rfloor$	
= <i>Italia Meridionale</i>	582 421			1.46	1
+ <i>Nord-Occidentale</i>	460 487			1.15	1
+ <i>Nord-Orientale</i>	353 714			0.89	1
+ <i>Italia Centrale</i>	341 612			0.86	1
+ <i>Italia Insulare</i>	256 579			0.64	1
Sum [<i>Quota</i>]	26 566 217	$\lfloor 368\,975 \rfloor$	72		

LT – Republic of Lithuania

Lithuania allocates its 12 seats across the whole electoral area. There is a five percent threshold relative to votes cast. The Hare quota variant HQ2 together with the full-seat restricted residual apportionment gR2 is used, HQ2gR2.

The number of votes cast is 564 803, with 550 017 valid votes. Five percent of the votes cast is 28 240.2. Six parties pass the threshold, and participate in the apportionment calculation. This leaves 97 514 ineffective votes, cast for nine parties. The HQ2 quota is $= \lceil 452\,503/12 \rceil = 37\,709$.

The electoral provisions include a clause that, if necessary, the threshold is lowered such that at least 60 percent of valid votes are effective. In 2009 the clause does not apply as 452 503 equals 82.3 percent.

No party passing the threshold is affected by the full-seat restriction in the residual apportionment. Otherwise a violation of Art. 2A, *European Electoral Act 2002*, would have emerged. The full-seat restriction implied a threshold of HQ2=37 709 votes, that is, 6.7 percent of the 564 803 votes cast.

EP2009LT	Votes	Quotient	HQ2gR2
Tėvynės sąjunga – Lietuvos krikščionys demokratai:EPP	147 756	3.92	4
Lietuvos socialdemokratų partija:S&D	102 347	2.71	3
Partija Tvarka ir teisingumas:EFD	67 237	1.78	2
Darbo partija:ALDE	48 368	1.28	1
Lietuvos lenkų rinkimų akcija:ECR	46 293	1.23	1
Lietuvos Respublikos liberalų sąjūdis:ALDE	40 502	1.07	1
Sum [Quota]	452 503	[37 709]	12

LU – Grand Duchy of Luxembourg

Luxembourg allocates its 6 seats across the whole electoral area. Voters have up to six votes that can be distributed across party lines, with a maximum of two votes for any candidate. There is no electoral threshold. The divisor method with rounding down is used, DivDwn.

There are 1 121 305 valid votes. The divisor interval is [109 266; 117 074], we use divisor 110 000.

EP2009LU	Votes	Quotient	DivDwn
CSV-Chrëschtlech Sozial Vollekspartei:EPP	351 223	3.19	3
LSAP-D'SOZIALISTEN:S&D	218 532	1.99	1
DP:ALDE	209 123	1.90	1
déi gréng:EG-EFA	188 637	1.71	1
ADR-Alternativ Demokratesch Reformpartei:NA	82 719	0.75	0
Lénk:NA	38 289	0.35	0
KPL-d'KOMMUNISTEN:NA	17 299	0.16	0
BIERGERLESCHT:NA	15 483	0.14	0
Sum [Divisor]	1 121 305	[110 000]	6

LV – Republic of Latvia

Latvia allocates its 8 seats across the whole electoral area. There is a five percent threshold relative to votes cast. The divisor method with standard rounding is used, DivStd.

The number of votes cast is 791 597, with 777 079 valid votes. Five percent of the votes cast is 39 579.9. Six parties pass the threshold, and participate in the apportionment calculation. This leaves 182 149 ineffective votes, cast for 11 parties. The divisor interval is [77 014.8; 103 262], we use divisor 100 000.

EP2009LV	Votes	Quotient	DivStd
Pilsoniskā savienība:EPP	192 537	1.93	2
Saskaņas Centrs:S&D,GUE/NGL	154 894	1.55	2
Par cilvēka tiesībām vienotā Latvijā:EG-EFA	76 436	0.76	1
Partija LPP/LC:ALDE	59 326	0.59	1
Apvienība Tēvzemei un Brīvībai/LNNK:ECR	58 991	0.59	1
Jaunais laiks:EPP	52 751	0.53	1
Sum [Divisor]	594 935	[100 000]	8

MT – Republic of Malta

Malta allocates its 5 seats across the whole electoral area. The single transferable vote (STV) system with random vote transfer is used, STVran.

The Droop quota DrQ is $\lfloor 248\,169/(5+1) \rfloor + 1 = 41\,362$. For more details see [MT].

EP2009MT	1st Pref	STVran
Simon Busuttil	Partit Nazzjonalista:EPP	68 782
Louis Grech	Partit Laburista:S&D	27 753
Edward Scicluna	Partit Laburista:S&D	24 574
John Montalto Attard	Partit Laburista:S&D	12 880
David Casa	Partit Nazzjonalista:EPP	6 539
further nominees	—	—
Sum [Quota]	[41 362]	248 169
		5

NL – Kingdom of the Netherlands

The Netherlands allocate their 25 seats across the whole electoral area, without an electoral threshold. There are three electoral alliances. The main apportionment uses the divisor method with rounding down, DivDwn. The three sub-apportionments apply the Hare quota HaQ with residual fit by greatest remainders, $HaQgrR$.

The super-apportionment has divisor interval $[157\,735; 158\,785]$, we use divisor 158 000. The HaQ quotas for the sub-apportionments are $1\,223\,773/7 = 174\,824.7$ for *Alliance 1*, $1\,034\,065/6 = 172\,344.2$ for *Alliance 2*, and $952\,711/6 = 158\,785.2$ for *Alliance 3*.

EP2009NL	Votes	Quotient	DivDwn	Quotient	HaQgrR
Alliance 1 [Quota]	1 223 773	7.75	7	[174 824.7]	
= CDA:EPP	913 233			5.22	5
+ ChristenUnie-SGP:ECR,EFD	310 540			1.78	2
Alliance 2 [Quota]	1 034 065	6.55	6	[172 344.2]	
= VVD:ALDE	518 643			3.01	3
+ D66:ALDE	515 422			2.99	3
Alliance 3 [Quota]	952 711	6.03	6	[158 785.2]	
= P.v.d.A.:S&D	548 691			3.46	3
+ GROENLINKS:EG-EFA	404 020			2.54	3
Partij voor de Vrijheid:NA	772 746	4.89	4		
Socialistische Partij:GUE/NGL	323 269	2.05	2		
Partij voor de Dieren:NA	157 735	0.998	0		
EKP:NA	21 448	0.14	0		
Newropeans:NA	19 840	0.13	0		
Libertas:EFD	14 612	0.09	0		
Liberaal Democratische Partij:NA	10 757	0.07	0		
De Groenen:EG-EFA	8 517	0.05	0		
Solidara:NA	7 533	0.05	0		
Europa Voordelig! & Duurzaam:NA	4 431	0.03	0		
Partij voor Europese Politiek:NA	2 427	0.02	0		
Sum [Divisor]	4 553 864	[158 000]	25		

PL – Republic of Poland

Poland allocates its 50 seats across the whole electoral area, subdivided into thirteen districts. There is a five percent threshold relative to valid votes. The super-apportionment uses the divisor method with rounding down, DivDwn. The four sub-apportionments apply the Hare quota HaQ with residual fit by greatest remainders, HaQgrR.

There are 7 364 763 valid votes. Five percent thereof is 368 238.2. Four parties pass the threshold, and participate in the apportionment calculation. This leaves 650 393 ineffective votes, cast for eight parties. The super-apportionment has divisor interval [129 037; 129 823], we use divisor 129 400. In the sub-apportionments, the HaQ quotas are $3\,271\,852/25 = 130\,874.1$ for *Platforma Obywatelska RP*, $2\,017\,607/15 = 134\,507.1$ for *Prawo i Sprawiedliwość*, $908\,765/7 = 129\,823.6$ for *Wyborczy Sojusz Lewicy Demokratycznej - Unia Pracy*, and $516\,146/3 = 172\,048.7$ for *Polskie Stronnictwo Ludowe*.

EP2009PL	Votes	Quotient	DivDwn	Quotient	HaQgrR
Platforma Obywatelska RP [<i>Quota</i>]	3 271 852	25.28	25	[130 874.1]	
= Katowice, okr. 11	523 602			4.00	4
+ Warszawa 1, okr. 4	434 421			3.32	3
+ Wrocław, okr. 12	347 617			2.66	3
+ Kraków, okr. 10	327 854			2.51	2
+ Poznań, okr. 7	289 442			2.21	2
+ Gdańsk, okr. 1	285 268			2.18	2
+ Łódź, okr. 6	204 798			1.56	2
+ Gorzów Wielkopolski, okr. 13	203 038			1.55	2
+ Bydgoszcz, okr. 2	162 556			1.24	1
+ Olsztyn, okr. 3	159 943			1.22	1
+ Warszawa 2, okr. 5	114 000			0.87	1
+ Lublin, okr. 8	112 221			0.86	1
+ Rzeszów, okr. 9	107 092			0.82	1
Prawo i Sprawiedliwość [<i>Quota</i>]	2 017 607	15.59	15	[134 507.1]	
= Kraków, okr. 10	383 631			2.852	3
+ Katowice, okr. 11	207 429			1.542	1
+ Warszawa 1, okr. 4	196 720			1.463	1
+ Wrocław, okr. 12	163 197			1.213	1
+ Rzeszów, okr. 9	153 661			1.142	1
+ Lublin, okr. 8	136 986			1.018	1
+ Łódź, okr. 6	134 947			1.003	1
+ Warszawa 2, okr. 5	129 165			0.960	1
+ Olsztyn, okr. 3	121 921			0.906	1
+ Poznań, okr. 7	121 216			0.901	1
+ Gdańsk, okr. 1	105 946			0.788	1
+ Gorzów Wielkopolski, okr. 13	89 605			0.666	1
+ Bydgoszcz, okr. 2	73 183			0.544	1
Wyborczy Sojusz Lewicy Dem. [<i>Quota</i>]	908 765	7.02	7	[129 823.6]	
= Katowice, okr. 11	117 884			0.91	1
+ Kraków, okr. 10	95 277			0.73	1
+ Poznań, okr. 7	94 180			0.73	1
+ Wrocław, okr. 12	93 172			0.72	1
+ Gorzów Wielkopolski, okr. 13	89 471			0.69	1
+ Warszawa 1, okr. 4	84 740			0.65	1
+ Bydgoszcz, okr. 2	79 400			0.61	1
+ Łódź, okr. 6	62 923			0.48	0
+ Olsztyn, okr. 3	59 194			0.46	0
+ Gdańsk, okr. 1	50 427			0.39	0
+ Warszawa 2, okr. 5	30 225			0.23	0
+ Rzeszów, okr. 9	27 147			0.21	0
+ Lublin, okr. 8	24 725			0.19	0

EP2009PL (<i>continued</i>)	Votes	Quotient	DivDwn	Quotient	HaQgrR
Polskie Stronnictwo Ludowe [<i>Quota</i>]	516 146	3.99	3	[172 048.7]	
= Warszawa 2, okr. 5	72 551			0.42	1
+ Kraków, okr. 10	60 846			0.35	1
+ Poznań, okr. 7	52 716			0.31	1
+ Lublin, okr. 8	51 954			0.30	0
+ Rzeszów, okr. 9	45 685			0.27	0
+ Wrocław, okr. 12	41 975			0.24	0
+ Bydgoszcz, okr. 2	38 092			0.22	0
+ Olsztyn, okr. 3	38 012			0.22	0
+ Łódź, okr. 6	32 390			0.19	0
+ Katowice, okr. 11	23 566			0.14	0
+ Warszawa 1, okr. 4	22 899			0.13	0
+ Gorzów Wielkopolski, okr. 13	22 290			0.13	0
+ Gdańsk, okr. 1	13 170			0.08	0
Sum [Divisor]	6 714 370	[129 400]	50		

PT – Portuguese Republic [PT]

Portugal allocates its 22 seats across the whole electoral area. There is no electoral threshold. The divisor method with rounding down is used, DivDwn.

The divisor interval is [126 569; 127 337], we use divisor 127 000.

EP2009PT	Votes	Quotient	DivDwn
PPD/PSD:EPP	1 129 243	8.892	8
PS:S&D	946 475	7.453	7
B.E.:GUE/NGL	382 011	3.008	3
PCP-PEV:GUE/NGL	379 707	2.990	2
CDS-PP:EPP	298 057	2.347	2
MEP:NA	52 828	0.416	0
PCTP/MRPP:NA	43 141	0.340	0
MPT:NA	23 415	0.184	0
MMS:NA	21 636	0.170	0
P.H.:NA	16 980	0.134	0
PPM:NA	13 794	0.109	0
P.N.R.:NA	13 039	0.103	0
POUS:NA	5 101	0.040	0
Sum [Divisor]	3 325 427	[127 000]	22

RO – Romania

Romania allocates its 33 seats across the whole electoral area. There are two electoral thresholds. One threshold applies to parties, and is five percent of valid votes. The other, implicit threshold applies to independent candidates, and is determined by variant 4 of the Hare quota, $HQ4 = \lceil \text{valid votes} / h \rceil$. The divisor method with rounding down is used, DivDwn.

There are 4 840 033 valid votes. The five percent party threshold is 242 001.7, and the implicit independent candidate threshold is $\lceil 4\,840\,033 / 33 \rceil = \lceil 146\,667.7 \rceil = 146\,668$. Five parties and one independent candidate pass the thresholds, and participate in the apportionment calculation. This leaves 139 728 ineffective votes, cast for four parties and five independent candidates. The divisor interval is [130 728; 136 747], we use divisor 134 000.

EP2009RO	Votes	Quotient	DivDwn
Alianța Politică PSD+PC:S&D	1 504 218	11.23	11
Partidul Democrat Liberal:EPP	1 438 000	10.73	10
Partidul Național Liberal:ALDE	702 974	5.25	5
Uniunea Democrată a Maghiarilor din România:EPP	431 739	3.22	3
Partidul România Mare:NA	419 094	3.13	3
Elena Băsescu:EPP	204 280	1.52	1
Sum [Divisor]	4 700 305	[134 000]	33

SE – Kingdom of Sweden

Sweden allocates its 18 seats across the whole electoral area. There is a four percent threshold, but it is not clear to us whether the percentage refers to votes cast, or to valid votes. For the 2009 election both thresholds leave 292 172 ineffective votes, cast for six parties. The divisor method with modified standard rounding is used, Div0.7. Since all quotients stay above 0.7, the modification is not called upon.

The divisor interval is [150 610; 170 488], we use divisor 160 000.

EP2009SE	Votes	Quotient	Div0.7
Arbetarepartiet-Socialdemokraterna:S&D	773 513	4.83	5
Moderata Samlingspartiet:EPP	596 710	3.73	4
Folkpartiet liberalerna:ALDE	430 385	2.69	3
Miljöpartiet de gröna:EG-EFA	349 114	2.18	2
Piratpartiet:EG-EFA	225 915	1.41	1
Vänsterpartiet:GUE-NGL	179 182	1.12	1
Centerpartiet:ALDE	173 414	1.08	1
Kristdemokraterna:EPP	148 141	0.93	1
Sum [Divisor]	2 876 374	[160 000]	18

SI – Republic of Slovenia

Slovenia allocates its 7 seats across the whole electoral area. There is a four percent electoral threshold, but it is not clear to us whether the percentage refers to votes cast, or to valid votes. For the 2009 election both thresholds leave 45 894 ineffective votes, cast for six parties. The divisor method with rounding down is used, DivDwn.

The divisor interval is [41 187.7; 42 703.5], we use divisor 42 000.

EP2009SI	Votes	Quotient	DivDwn
Slovenska demokratska stranka-sds:EPP	123 563	2.94	2
Socialni demokrati:S&D	85 407	2.03	2
Nova slovenija-krščanska ljudska stranka:EPP	76 866	1.83	1
LDS Liberalna Demokracija Slovenije:ALDE	53 212	1.27	1
ZARES-nova politika:ALDE	45 238	1.08	1
DeSUS-demokratska stranka upokojenecv slovenije:NA	33 292	0.79	0
Sum [Divisor]	417 578	[42 000]	7

SK – Slovak Republic

The Slovak Republic allocates its 13 seats across the whole electoral area. There is a five percent threshold relative to valid votes. The apportionment method uses the Droop quota variant DQ3 with residual fit by greatest remainders, DQ3grR.

There are 826 782 valid votes. Five percent thereof is 41 339.1. Six parties pass the threshold, and participate in the apportionment calculation. This leaves 117 778 ineffective votes, cast for 11 parties. The quota is $DQ3 = \langle 709\,004 / (13 + 1) \rangle = 50\,643$.

EP2009SK	Votes	Quotient	DQ3grR
SMER-sociálna demokracia:S&D	264 722	5.23	5
Slov. demokr. a kresťanská únia-Demokr. strana:EPP	140 426	2.77	2
Strana maďarskej koalície-Magyar Koalíció Pártja:EPP	93 750	1.85	2
Kresťanskodemokratické hnutie:EPP	89 905	1.78	2
Ľudová strana-Hnutie za demokratické Slovensko:NA	74 241	1.47	1
Slovenská národná strana:EFD	45 960	0.91	1
Sum [Quota]	709 004	[50 643]	13

UK – United Kingdom of Great Britain and Northern Ireland

The United Kingdom allocates its 72 seats in 12 constituencies. There is no electoral threshold. The British electoral provisions allot seats to constituencies in proportion to population. In eleven constituencies the divisor method with rounding down is used, DivDwn.

Constituency	Seats	Divisor interval	Divisor	Constituency	Seats	Divisor interval	Divisor
(1) <i>Eastern</i>	7	[141 016; 156 960]	150 000	(7) <i>South West</i>	6	[144 179; 156 247]	150 000
(2) <i>East Midland</i>	5	[123 425; 151 428]	140 000	(8) <i>West Midlands</i>	6	[132 283; 150 235]	140 000
(3) <i>London</i>	8	[124 197; 159 679]	140 000	(9) <i>Yorkshire/Humber</i>	6	[115 005; 120 139]	120 000
(4) <i>North East</i>	3	[90 700; 103 644]	100 000	(10) <i>Scotland</i>	6	[107 003; 114 926]	110 000
(5) <i>North West</i>	8	[130 870; 132 094]	131 000	(11) <i>Wales</i>	4	[73 082; 87 585]	80 000
(6) <i>South East</i>	10	[162 458; 165 170]	164 000				

EP2009UK	Votes	Quotient	DivDwn
(1) <i>Eastern</i>			
CP:ECR	500 331	3.34	3
UKIP:EFD	313 921	2.09	2
LD:ALDE	221 235	1.47	1
LP:S&D	167 833	1.12	1
Green:EG-EFA	141 016	0.94	0
BNP:NA	97 013	0.65	0
UKF:NA	38 185	0.25	0
EDP:NA	32 211	0.21	0
CPPCL:NA	24 646	0.16	0
No2EU:NA	13 939	0.09	0
SLP:NA	13 599	0.09	0
AC:NA	13 201	0.09	0
PD:NA	9 940	0.07	0
indep1:NA	9 916	0.07	0
JT:NA	6 354	0.04	0
Sum [Divisor]	1 603 340	[150 000]	7
(2) <i>East Midland</i>			
CP:ECR	370 275	2.64	2
LP:S&D	206 945	1.48	1
UKIP:EFD	201 984	1.44	1
LD:ALDE	151 428	1.08	1
BNP:NA	106 319	0.76	0
EDP:NA	28 498	0.20	0
CPPCL:NA	17 907	0.13	0
SLP:NA	13 590	0.10	0
No2EU:NA	11 375	0.08	0
Green:EG-EFA	83 939	0.60	0
UKF:NA	20 561	0.15	0
PD:NA	7 882	0.06	0
JT:NA	7 362	0.05	0
Sum [Divisor]	1 228 065	[140 000]	5

EP2009UK (<i>continued</i>)	Votes	Quotient	DivDwn
<i>(3) London</i>			
CP:ECR	479 037	3.42	3
LP:S&D	372 590	2.66	2
LD:ALDE	240 156	1.72	1
Green:EG-EFA	190 589	1.36	1
UKIP:EFD	188 440	1.35	1
BNP:NA	86 420	0.62	0
CPPCL:NA	51 336	0.37	0
indep1:NA	50 014	0.36	0
EDP:NA	24 477	0.17	0
No2EU:NA	17 758	0.13	0
SLP:NA	15 306	0.11	0
PD:NA	8 444	0.06	0
JT:NA	7 284	0.05	0
SP:NA	4 050	0.03	0
indep1:NA	4 918	0.04	0
Yes2Europe:NA	3 384	0.02	0
indep2:NA	3 248	0.02	0
indep3:NA	1 972	0.01	0
indep4:NA	1 603	0.01	0
Sum [Divisor]	1 751 026	[140 000]	8
<i>(4) North East</i>			
LP:S&D	147 338	1.47	1
CP:ECR	116 911	1.17	1
LD:ALDE	103 644	1.04	1
UKIP:EFD	90 700	0.91	0
BNP:NA	52 700	0.53	0
Green:EG-EFA	34 081	0.34	0
EDP:NA	13 007	0.13	0
SLP:NA	10 238	0.10	0
No2EU:NA	8 066	0.08	0
CPPCL:NA	7 263	0.07	0
PD:NA	3 010	0.03	0
JT:NA	2 904	0.03	0
Sum [Divisor]	589 862	[100 000]	3
<i>(5) North West</i>			
CP:ECR	423 174	3.23	3
LP:S&D	336 831	2.57	2
UKIP:EFD	261 740	2.00	1
LD:ALDE	235 639	1.80	1
BNP:NA	132 094	1.01	1
Green:EG-EFA	127 133	0.97	0
EDP:NA	40 027	0.31	0
SLP:NA	26 224	0.20	0
CPPCL:NA	25 999	0.20	0
No2EU:NA	23 580	0.18	0
JT:NA	8 783	0.07	0
PD:NA	6 980	0.05	0
indep1:NA	3 621	0.03	0
Sum [Divisor]	1 651 825	[131 000]	8

EP2009UK (<i>continued</i>)	Votes	Quotient	DivDwn
<i>(6) South East</i>			
CP:ECR	812 288	4.95	4
UKIP:EFD	440 002	2.68	2
LD:ALDE	330 340	2.01	2
Green:EG-EFA	271 506	1.66	1
LP:S&D	192 592	1.17	1
BNP:NA	101 769	0.62	0
EDP:NA	52 526	0.32	0
CPPCL:NA	35 712	0.22	0
No2EU:NA	21 455	0.13	0
PD:NA	16 767	0.10	0
SLP:NA	15 484	0.09	0
UKF:NA	15 261	0.09	0
JT:NA	14 172	0.09	0
PPNVJE:NA	9 534	0.06	0
RPA:NA	5 450	0.03	0
Sum [Divisor]	2 334 858	[164 000]	10
<i>(7) South West</i>			
CP:ECR	468 742	3.12	3
UKIP:EFD	341 845	2.28	2
LD:ALDE	266 253	1.78	1
Green:EG-EFA	144 179	0.96	0
LP:S&D	118 716	0.79	0
BNP:NA	60 889	0.41	0
PP:NA	37 785	0.25	0
EDP:NA	25 313	0.17	0
CPPCL:NA	21 329	0.14	0
indep1:NA	14 922	0.10	0
SLP:NA	10 033	0.07	0
No2EU:NA	9 741	0.06	0
indep2:NA	8 971	0.06	0
PD:NA	7 292	0.05	0
FPFTP:NA	7 151	0.05	0
JT:NA	5 758	0.04	0
indep3:NA	789	0.01	0
Sum [Divisor]	1 549 708	[150 000]	6
<i>(8) West Midlands</i>			
CP:ECR	396 847	2.83	2
UKIP:EFD	300 471	2.15	2
LP:S&D	240 201	1.72	1
LD:ALDE	170 246	1.22	1
BNP:NA	121 967	0.87	0
EDP:NA	32 455	0.23	0
CPPCL:NA	18 784	0.13	0
No2EU:NA	13 415	0.10	0
SLP:NA	14 724	0.11	0
Green:EG-EFA	88 244	0.63	0
JT:NA	8 721	0.06	0
PD:NA	6 961	0.05	0
Sum [Divisor]	1 413 036	[140 000]	6

EP2009UK (<i>continued</i>)	Votes	Quotient	DivDwn
(9) <i>Yorkshire and Humber</i>			
CP:ECR	299 802	2.50	2
LP:S&D	230 009	1.92	1
UKIP:EFD	213 750	1.78	1
BNP:NA	120 139	1.00	1
LD:ALDE	161 552	1.35	1
Green:EG-EFA	104 456	0.87	0
EDP:NA	31 287	0.26	0
SLP:NA	19 380	0.16	0
CPPCL:NA	16 742	0.14	0
No2EU:NA	15 614	0.13	0
JT:NA	7 181	0.06	0
PD:NA	6 268	0.05	0
Sum [Divisor]	1 226 180	[120 000]	6
(10) <i>Scotland</i>			
SNP:EG-EFA	321 007	2.92	2
LP:S&D	229 853	2.09	2
CP:ECR	185 794	1.69	1
LD:ALDE	127 038	1.15	1
Green:EG-EFA	80 442	0.73	0
BNP:NA	27 174	0.25	0
UKIP:EFD	57 788	0.53	0
SLP:NA	22 135	0.20	0
CPPCL:NA	16 738	0.15	0
SSP:NA	10 404	0.09	0
indep1:NA	10 189	0.09	0
No2EU:NA	9 693	0.09	0
JT:NA	6 257	0.06	0
Sum [Divisor]	1 104 512	[110 000]	6
(11) <i>Wales</i>			
CP:ECR	145 193	1.81	1
LP:S&D	138 852	1.74	1
PC:EG-EFA	126 702	1.58	1
UKIP:EFD	87 585	1.09	1
LD:ALDE	73 082	0.91	0
BNP:NA	37 114	0.46	0
CPPCL:NA	13 037	0.16	0
Green:EG-EFA	38 160	0.48	0
SLP:NA	12 402	0.16	0
No2EU:NA	8 600	0.11	0
JT:NA	3 793	0.05	0
Sum [Divisor]	684 520	[80 000]	4

(12) The *Northern Ireland* constituency apportions its 3 seats using the single transferable vote (STV) system with fractional vote transfer, STVfra. The Droop quota DrQ is $\lfloor 484\,572/(3 + 1) \rfloor + 1 = 121\,144$. For more details see [UK].

EP2009UK (<i>continued</i>)	1st Pref	STVfra
(12) <i>Northern Ireland</i>		
Bairbre de Brún Sinn Féin:GUE-NGL	126 184	1
Diane Dodds Democratic Unionist Party:NA	88 346	1
Jim Nicholson Ulster Conservatives and Unionists:ECR	82 893	1
Alban Maginness Social Democratic & Labour Party:S&D	78 489	0
Jim Allister Traditional Unionist Voice:NA	66 197	0
Ian James Parsley Alliance Party:ALDE	26 699	0
Steven Agnew Green Party:EG-EFA	15 764	0
Sum [Quota]	[121 144]	3

Bibliography

Articles

- [Axt2006] Heinz-Jürgen Axt. Wahlen zum Europäischen Parlament: Trotz Europäisierungstendenzen noch immer nationale Sekundärwahlen. In *Wahlsysteme und Wahltypen*, pages 122–144. Wiesbaden, 2006.
- [BalinskiYoung2001] Michel L. Balinski and H. Peyton Young. *Fair Representation – Meeting the Ideal of One Man, One Vote. Second Edition*. Washington DC, 2001.
- [Blackman1999] Richard Blackman. *European Parliamentary Elections 1999, Guide to the Electoral Systems in the Member States*. London, 1999.
- [FarrellScully2005] David M. Farrell and Roger Scully. Electing the European Parliament: How Uniform are 'Uniform' Electoral Systems? *Journal of Common Market Studies*, 43:969–984, 2005.
- [FarrellScully2007] David M. Farrell and Roger Scully. *Representing Europe's Citizens? Electoral Institutions and the Failure of Parliamentary Representation*. Oxford, 2007.
- [Hovehne1999] Marietta Hovehne. *Ein demokratisches Verfahren für die Wahlen zum Europäischen Parlament*. Frankfurt am Main, 1999.
- [Lehmann2009] Wilhelm Lehmann. *The European Elections: EU Legislation, National Provisions and Civic Participation*. Directorate-General for Internal Policies, Policy Department C, Brussels, 2009. www.europarl.europa.eu/activities/committees/studies/download.do?language=de&file=26188.
- [Lenz1995] Christopher Lenz. *Ein einheitliches Verfahren für die Wahl des Europäischen Parlaments – Unverwirklichte Vorgabe der Gemeinschaftsverträge*. Baden-Baden, 1995.
- [Millar1990] David Millar. A uniform electoral procedure for European elections. *Electoral Studies*, 9:37–44, 1990.
- [Nohlen2004] Dieter Nohlen. Wie wählt Europa? Das polymorphe Wahlsystem zum Europäischen Parlament. *Aus Politik und Zeitgeschichte*, B17:29–37, 2004. archiv.ub.uni-heidelberg.de/volltextserver/frontdoor.php?source_opus=4696.
- [OSCE2009] OSCE. Expert Group Report on the 4-7 June 2009 elections to the European Parliament, September 2009. www.osce.org/documents/odihr/2009/09/39652_en.pdf.
- [Puntscher2003] Sonja Puntscher-Rieckmann, Johannes Pollak, Bedanna Bapuly, Monika Mokre, and Peter Slominski. *Constitutionalism and Democratic Representation in the European Union*. Austrian Academy of Sciences, Vienna, 2003.
- [Reif1997] Karlheinz Reif and Herman Schmitt. Second-order elections. *European Journal of Political Research*, 31:109–124, 1997.
- [Schleicher2009] David Schleicher. What if europe held an election and no one cared? *George Mason University Law and Economics Research Paper Series*, 09-68:1–68, 2009. www.law.gmu.edu/assets/files/publications/working_papers/0968WhatifEurope.pdf.
- [Silvestro1990] Massimo Silvestro. L'élection des membres du Parlement Européen au suffrage universel et direct. *Revue du marché commun*, 335:216–218, 1990.
- [Toplak2007] Jurij Toplak. European Parliament elections and the uniform election procedure. *VII World Congress of the International Association of Constitutional Law*, 2007. www.enelsyn.gr/papers/w3/Paperby%20by%20Jurij%20Toplak.pdf.
- [Wahlrecht.de] Martin Fehndrich, Wilko Zicht, and Matthias Cantow. Wahlrecht.de, 2010. www.wahlrecht.de/.
- [Wall2006] Alan Wall, Andrew Ellis, Ayman Ayoub, Carl W. Dundas, Joram Rukambe, and Sara Staino. *Electoral Management Design: The International IDEA Handbook*. Stockholm, 2006. www.idea.int/publications/emd/upload/EMD_inlay_final.pdf.
- [Wessels2008] Wolfgang Wessels. *Das politische System der Europäischen Union*. Wiesbaden, 2008.

- [Wuest2006] Andreas M. Wüst and Markus Tausendpfund. Wahlen in Europa. *Politische Vierteljahresschrift*, 47:289–309, 2006.
- [Wuest2009] Andreas M. Wüst and Markus Tausendpfund. 30 Jahre Europawahlen. *Aus Politik und Zeitgeschichte*, 23-24:3–9, 2009.

European Documents

- [Accession2005] Act concerning the conditions of accession of the Republic of Bulgaria and Romania and the adjustments to the treaties on which the European Union is founded. *Official Journal of the European Union*, L 157:203–220, 2005. <http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:L:2005:157:0203:0220:EN:PDF>.
- [Amsterdam1999] Treaty on European Union (Treaty of Amsterdam). *Official Journal of the European Union*, C 340, 1997. <http://eur-lex.europa.eu/en/treaties/dat/11997D/htm/11997D.html>.
- [Convention1998] Protocol to the Convention for the Protection of Human Rights and Fundamental Freedoms as amended by Protocol No. 11. <http://conventions.coe.int/Treaty/en/Treaties/Html/009.htm>, 1998.
- [Council2008] Brussels European Council 11 and 12 December 2008. http://www.consilium.europa.eu/ueDocs/cms_Data/docs/pressData/en/ec/104692.pdf, 2008.
- [Duff2008] Andrew Duff. DRAFT REPORT on a proposal for a modification of the Act concerning the election of the Members of the European Parliament by direct universal suffrage of 20 September 1976. *Committee on Constitutional Affairs*, 2007/2207(INI), 2007. http://www.europarl.europa.eu/meetdocs/2004_2009/documents/pr/746/746440/746440en.pdf.
- [ECSC1951] Treaty constituting the European Coal and Steel Community. Publishing Services of the European Communities, April 1951. http://eur-lex.europa.eu/en/treaties/dat/11951K/tif/TRAITES_1951_CECA_1_EN_0001.tif.
- [EP2009] European Parliament. United in diversity: Rules for the European Parliamentary elections. <http://www.europarl.europa.eu/sides/getDoc.do?pubRef=-//EP//NONSGML+IM-PRESS+20090302ST050552+0+DOC+PDF+VO//EN&language=EN>, 2009.
- [EuropeanElectoralAct1976] Act concerning the election of the representatives of the Assembly by direct universal suffrage. *Official Journal of the European Communities*, L 278:5–11, 1976. <http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=CELEX:41976X1008%2801%29:en:HTML>.
- [EuropeanElectoralAct2002] Amending the Act concerning the election of the representatives of the European Parliament by direct universal suffrage, annexed to Decision 76/787/ECSC, EEC, Euratom. *Official Journal of the European Communities*, L(283), October 2002. <http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:L:2002:283:0001:0004:EN:PDF>.
- [INI/2009/2134] Proposal for a modification of the Act concerning the election of the Members of the European Parliament by direct universal suffrage of 20 September 1976. <http://www.europarl.europa.eu/oeil/FindByProcnum.do?lang=2&procnum=INI/2009/2134>, 2009.
- [LamassoureSeverin2007] Alain Lamassoure and Adrian Severin. Report on the composition of the European Parliament. *Committee on Constitutional Affairs*, 2007/2169(INI), 2007. <http://www.europarl.europa.eu/sides/getDoc.do?pubRef=-//EP//NONSGML+REPORT+A6-2007-0351+0+DOC+PDF+VO//EN>.
- [Lisbon2009] Treaty of Lisbon amending the Treaty on European Union and the Treaty establishing the European Community. *Official Journal of the European Union*, C 306:1–388, 2007. <http://eur-lex.europa.eu/JOHtml.do?uri=OJ%3AC%3A2008%3A115%3ASOM%3AEN%3AHTML>.
- [Maastricht1993] Treaty on European Union. *Official Journal*, C 191, 1992. <http://eur-lex.europa.eu/en/treaties/dat/11992M/htm/11992M.html>.

[Results2009] Results of the 2009 European elections. http://www.europarl.europa.eu/parliament/archive/elections2009/en/new_parliament_en.html.

[Styleguide2009] European Union. Interinstitutional style guide. <http://publications.europa.eu/code/pdf/370000en.htm>, 2009.

National Electoral Provisions and Election Results

- [AT] (Austria) Art. 77 (2, 5, 6), Bundesgesetz über die Wahl der von Österreich zu entsendenden Abgeordneten zum Europäischen Parlament (Europawahlordnung - EuWO) [in German]. Provisions http://www.bmi.gv.at/cms/BMI_wahlen/europawahl/Wahlordnung.aspx, Results <http://wahl09.bmi.gv.at/>.
- [BE] (Belgium) Art. 10 § 3 (2), Loi du 23 mars 1989 relative à l'élection du Parlement Européen [in French]. Provisions http://www.ibz.rrn.fgov.be/fileadmin/user_upload/Elections2009/fr/lois/LOI_DU_23_MARS_1989_Vers20090401.pdf, Results http://wahlen2009.belgium.be/de/eur/results/results_tab_EUR00000.html.
- [BG] (Bulgaria) Art. 116, ЗАКОН ЗА ИЗБИРАНЕ НА ЧЛЕНОВЕ НА ЕВРОПЕЙСКИЯ ПАРЛАМЕНТ ОТ РЕПУБЛИКА БЪЛГАРИЯ [in Bulgarian]. Provisions <http://www.lex.bg/bg/laws/ldoc/2135545857>, Results http://rezultati.cikep2009.eu/results/rik_00.html.
- [CY] (Cyprus) Art. 23 (V), On the elections of members of the European Parliament 2004 [in Greek]. Provisions http://moi.gov.cy//admin/sections/filedepot/uploaded/file/PDF_FILES/EKLOGES/10%28I%292004%20pdfdoc_gr.pdf; Art. 32, Law on the Election of the House of Representatives [in Greek] http://www.parliament.cy/parliamentGR/002_08.htm, Results <http://www.kyprokekloges.com/>.
- [CZ] (Czech Republic) Art. 48 (1, 5), Act of Law No. 62/2003 Coll. of February 18th, 2003, on Elections to the European Parliament and on Change of Selected Acts of Law. Provisions <http://www.psp.cz/cgi-bin/eng/docs/laws/2003/62.html>, Results <http://www.volby.cz/pls/ep2009/ep11?xjazyk=CZ>.
- [DE] (Germany) Art. 2, Europawahlgesetz (EuWG) Gesetz über die Wahl der Abgeordneten des Europäischen Parlaments aus der Bundesrepublik Deutschland [in German]. Provisions <http://www.bundeswahlleiter.de/de/europawahlen/downloads/rechtsgrundlagen/europawahlgesetz.pdf>, Results http://www.bundeswahlleiter.de/de/europawahlen/EU_BUND_09/ergebnisse/bundesergebnisse/.
- [DK] (Denmark) Art. 32, Members of the European Parliament Elections Act Consolidated Act No. 143 of 24 February 2009. Provisions <http://elections.ism.dk/european-parliament-elections/Documents/EPL2009uk.pdf>, Results <http://www.dst.dk/valg/Valg1191212/valgpg/valgpgHL.htm>.
- [EE] (Estonia) Art. 61, European Parliament Election Act Passed 18 December 2002 (RT I 2003, 4, 22), entered into force 23 January 2003 (unofficial translation). Provisions http://vvk.ee/public/dok/EPestonia_eng.pdf, Results <http://www.vvk.ee/ep09/index.php?id=11208>.
- [EL] (Greece) Art. 6, Law 1427/1984 [in Greek]. Provisions http://www.ypes.gr/UserFiles/469b5eb8-008d-4a5b-968e-aaeca97be53b/egiklios19_09.doc, Results <http://ekloges-prev.singularlogic.eu/e2009/pages/index.html?lang=en>.
- [ES] (Spain) Art. 214 and 163, Spanish Election Act Ley Orgánica 5/1985, de 19 de junio, del Régimen Electoral General [in Spanish]. Provisions http://noticias.juridicas.com/base_datos/Admin/lo5-1985.html, Results http://www.juntaelectoralcentral.es/jelect/Publ_resultados_2009.pdf.
- [FI] (Finland) Art. 89, Law No. 714/1998 last amended in 2002 (unofficial translation). Provisions <http://www.finlex.fi/fi/laki/kaannokset/1998/en19980714.pdf>, Results http://192.49.229.35/EP2009/e/tulos/tulos_kokomaa.html.
- [FR] (France) Art. 3 and 4, Loi n°77-729 du 7 juillet 1977 relative à l'élection des représentants au Parlement européen. Version consolidée au 07 juin 2009 [in French]. Provisions http://www.legifrance.gouv.fr/affichTexte.do;jsessionid=0409B2DD9315CA5082EA5CB1663EE70C.tpdjo02v_3?idSectionTA=LEGISCTA000006085795&cidTexte=JORFTEXT000000338793&dateTexte=20091026, Results http://www.interieur.gouv.fr/sections/a_votre_service/resultats-elections/ER2009/index.html.
- [HU] (Hungary) Art. 8 (2), Act CXIII of 2003 with regards to the election of the MPs for the European Parliament (excerpt). Provisions http://www.valasztas.hu/en/ep2009/235/235_1_2.html, Results http://www.valasztas.hu/en/ep2009/291/291_0_index.html.
- [IE] (Ireland) Part II (7), XI (84, 85) European Parliament Elections Act 1997. Provisions <http://www.irishstatutebook.ie/1997/en/act/pub/0002/index.html>; Art. 4 European Parliament Elections (Amendment) Act 2004 <http://www.irishstatutebook.ie/2004/en/act/pub/0002/print.html>, Results <http://www.electionsireland.org/results/europe/2009euro.cfm>.

- [IT] (Italy) Art. 21 (1-3) and Art. 22 (3), Legge 24 Gennaio 1979, n. 18 (gu n. 029 del 30/01/1979) elezione dei rappresentanti dell'Italia al Parlamento Europeo [in Italian]. Provisions http://www.italgiure.giustizia.it/nir/lexs/1979/lexs_264902.html; , Art. 1, law of 20 February 2009, no. 10 [in Italian] <http://www.camera.it/parlam/leggi/090101.htm>, Results <http://elezionistorico.interno.it/index.php?tpel=E&dtel=07/06/2009&tpa=Y&tpe=A&lev0=0&levsut0=0&es0=S&ms=S>.
- [LT] (Lithuania) Art. 86, Law on the Elections to the European Parliament 20 November 2003, No. IX-1837. Provisions <http://www.legislationline.org/documents/action/popup/id/6925>, Results http://www.vrk.lt/2009_ep_rinkimai/output_en/rezultatai_daugiamand_apygardose/rezultatai_daugiamand_apygardose1turas.html.
- [LU] (Luxembourg) Art. 318, 319 and Annexe C, Loi électorale du 18 février 2003 [in French]. Provisions <http://www.legilux.public.lu/leg/a/archives/2009/0038/a038.pdf#page=2>, Results <http://www.elections.public.lu/fr/elections-europeennes/2009/resultats/circonscriptions/unique/index.html>.
- [LV] (Latvia) Art. 44 (1,2), Law on Elections to the European Parliament (Non-official translation) Modified by amendments adopted till 30 October 2008. Provisions <http://web.cvk.lv/pub/public/29098.html>, Results http://www.cvk.lv/cgi-bin/wdbcgiw/base/eiro9.veles9_rezultati.sak.
- [MT] (Malta) Art. 7, CHAPTER 467 European Parliament Elections Act. Provisions http://docs.justice.gov.mt/lom/Legislation/English/Leg/VOL_14/Chapt467.PDF; 13th Schedule, Part II (7-10), General Elections Act http://docs.justice.gov.mt/lom/legislation/english/leg/vol_9/chapt354.pdf, Results http://www.doi.gov.mt/EN/elections/2009/EU_Parlections/eu_parl1.asp.
- [NL] (Netherlands) Sections P5, P7, and P11, Act of 28 September 1989 containing new provisions governing the franchise and elections (Elections Act). Provisions http://www.kiesraad.nl/nl/Overige_Content/Bestanden/pdf_thema/pdf_thema-Elections_Act.pdf, Results http://www.kiesraad.nl/nl/Overige_Content/Bestanden/pdf_thema/Results_elections_EP_June_2009.pdf, http://www.kiesraad.nl/nl/Overige_Content/Bestanden/pdf_thema/EP_elections_residual_seats_and_combined_lists.pdf.
- [PL] (Poland) Art. 125, 127 and 129, Act of 23 January 2004 on elections to the European Parliament (unofficial translation). Provisions http://www.pkw.gov.pl/gallery/15/91/44/159144/6.THE_ACT_of_23_JANUARY_2004_ON_ELECTIONS_TO_THE_EUROPEAN_PARLIAMENT.pdf, Results <http://pe2009.pkw.gov.pl/PUE/EN/WYN/W/index.htm>.
- [PT] (Portugal) Art. 12, Parlamento Europeu - Lei Eleitoral Lei 14/87, 29 Abril [in Portuguese]. Provisions http://www.cne.pt/dl/legis_lepe_2005.pdf, Art. 13, Assembleia da República - Lei eleitoral Texto integral Lei 14/79 - 16 Maio [in Portuguese] <http://www.cne.pt/dl/lear2002.pdf>, Results <http://www.europeias2009.mj.pt/Europeias2009>.
- [RO] (Romania) Art. 20 and 21, Lege privind organizarea și desfășurarea alegerilor pentru Parlamentul European [in Romanian]. Provisions http://www.cdep.ro/proiecte/2006/900/00/4/leg_pl904_06.pdf, Results <http://www.bec2009pe.ro/Documente%20PDF/Rezultate/Rezultate%20finale/Proces%20verbal%20centralizare%20voturi.pdf>.
- [SE] (Sweden) Chapter 14, Section 3 and 6, The Elections Act (2005:837). Provisions http://www.val.se/pdf/2005_elections_act.pdf, Results <http://www.val.se/val/ep2009/slutresultat/riike/index.html>.
- [SI] (Slovenia) Art. 24 c, Election of Members of the European Parliament from the Republic of Slovenia Act Consolidated text. Provisions <http://www.dvk.gov.si/EU2009/dokumenti/ZakonAng.pdf>; Art. 90 and 92, National Assembly Elections Act Slovenia <http://www.dvk.gov.si/volitve/dz2000/en/zvdz.html>, Results <http://volitve.gov.si/ep2009/en/index.html>.
- [SK] (Slovak Republic) Art. 33 and 34, Act of the Slovak Republic on European Parliamentary Elections of 10th July 2003. Provisions http://www.statistics.sk/volbyep2004/ep2004a/files/EP_82.pdf, Results http://www.volbyesr.sk/volbyep2009/sr/tab3_en.html.
- [UK] (United Kingdom) Schedule 1 (2, 3, 3A), Schedule 2 (4), European Parliamentary Elections Act 1999. Provisions http://www.opsi.gov.uk/Acts/acts1999/ukpga_19990001_en_1, Results <http://www.euoparl.org.uk/section/european-elections/results-2009-european-elections-uk>, http://www.eoni.org.uk/european_election_2009_-_result-3.pdf.